

FLORIDA HIGHWAYS

Published by the State Road Department

Vol. VII

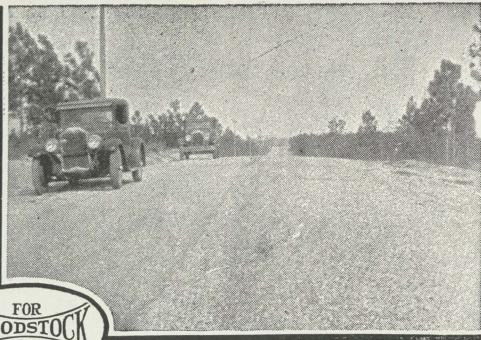
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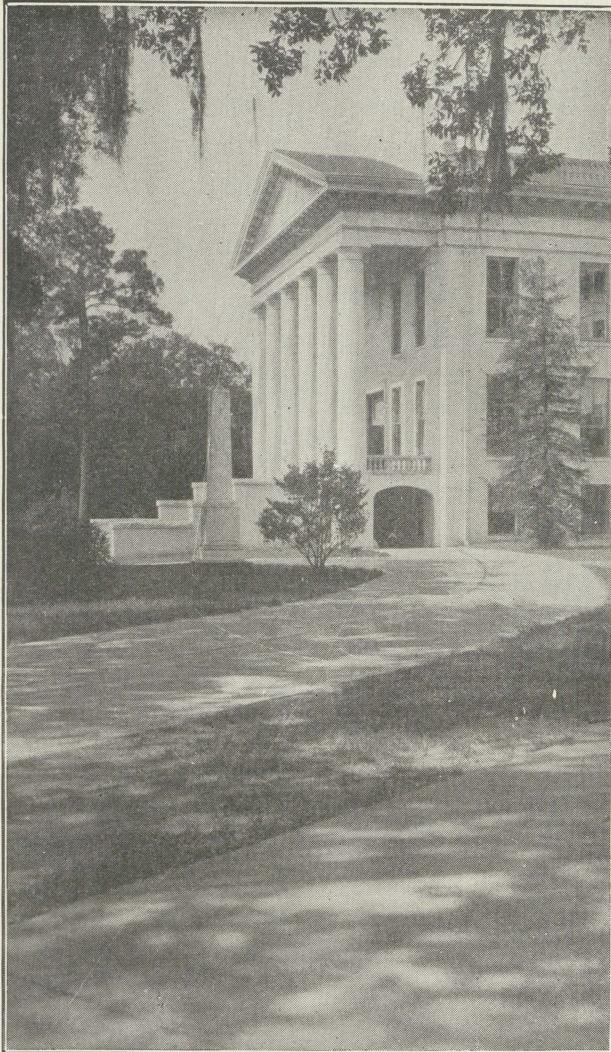
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FLORIDA

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No. 6



HIGHWAYS

JUNE
1930

Transactions of Meeting of State Road Department Held at Tampa, June 10, 1930

PURSUANT to due and legal notice, a meeting of the State Road Department of Florida was held at Tampa on the 10th day of June, 1930, with the following members present: Robert W. Bentley, Chairman; William A. Shands, Ernest R. Graham and George B. Hills. B. M. Duncan, State Highway Engineer; B. A. Meginniss, Attorney for the Department; Karl Roesch, Secretary, and H. J. Morrison, Federal Highway Engineer, were also in attendance. Mr. Mallie Martin, member of the Department from the Third Congressional District, was prevented by illness from attending the meeting and sent a request that Mr. Hills be permitted to act for him during the meeting. This request was received and ordered filed.

Hillsborough County—Road 17

Mr. G. A. Cary, mayor of Plant City, appeared before the Department and complained that the lands

contiguous to Road 17 on the western limits of Plant City are being flooded by reason of the inadequacy of the culvert constructed by the Department at that point on Road 17 and that there is also a failure of the drainage at the intersection of State Road 17 and the Thonotosassa road. Mr. Cary was assured that the engineer for the Department would investigate these matters with a view to determining the responsibility of the Department, and if responsible, remedying the situation.

Indian River County—Road 30

Senator A. W. Young, of Vero Beach, headed a delegation from Indian River county which tendered thanks to the Department for putting in its maintenance and betterment budget Road 30 in Indian River county. They asked that the Department's cooperation be continued along the present line.

Lake County—Road 2

Dr. I. N. Kennedy, of Eustis, appeared before the Department and requested the construction of the two miles of road to connect Eustis and the Mount Dora-Tavares road; that is, the construction of the extension of Project 695. Dr. Kennedy was informed that no provision has been made for this work in the budget, but that the Department will give consideration to the request.

Hendry County

Mr. W. H. Reynolds, of Fort Myers, headed a delegation which requested the construction of Road 25 across Hendry county. The delegation asked that if possible the entire grading be done during the rainy season. They were informed that the Department will let a contract in July for the hard-surfacing of the first 11 miles from the Palm Beach county line towards LaBelle, namely Project 806-A.

Hillsborough County—Road 23

Senator Pat Whitaker, Hon. W. T. Williams, chairman, and Messrs. J. W. Lester, John T. Gunn, J. N. Holmes and W. T. Watkins, members of the Board of County Commissioners of Hillsborough county, together with a delegation of approximately 150 citizens of said county, requested that the Department take over for maintenance a road between Plant City and Tampa, formerly known as State Road 17 before the construction of the new concrete road. Senator Whitaker declared that the former chairman of the State Road Department had agreed that if he, Senator Whitaker, would refrain from passing a bill routing State Road 17 along the old route, that the State Road Department would construct the new State Road 17, and in addition would take over for maintenance the old Road 17 between said points.

On motion of Mr. Graham, seconded by Mr. Bentley, the following resolution was adopted:

BE IT RESOLVED, That this Department does locate State Road 23 between Plant City and Palmetto, as follows: Commencing at Plant City and thence proceeding along the line of the old Road 17 to Fiftieth street in the city of Tampa, thence by way of Bay Shore Highway to Palmetto.

BE IT FURTHER RESOLVED, That the Department do take over for immediate maintenance that part of Road 23 so designated between Plant City and Fiftieth street in the city of Tampa.

Hillsborough County—Road 17

The chairman of the Board of County Commissioners of Hillsborough county requested that the Department construct the bridge across Hillsborough river on the proposed route of Road 17. He was informed that Road 17 has no preferential status west of Tampa and that the Department is therefore not authorized to expend money for the construction of said bridge.

Hillsborough County—Road 5

Mr. J. N. Holmes, member of the Board of County Commissioners, and a large delegation of citizens appeared to request information as to the Department's policy with reference to the location of an overpass on Road 5 near the railroad station of Bruen. Messrs. J. E. Chastaine and Stanley K. Wallace declared that the citizens of that community are opposed to so varying the location as to permit an overpass and that they preferred a grade crossing of the railroad at the point where the same now exists. They were informed that this matter would be taken under consideration.

Hillsborough County—Road 17

Mr. J. T. Gunn, member of the Board of County Commissioners, introduced to the Department members Mr. W. A. Maguyer, who presented a petition asking that State Road 17 be routed from Nebraska avenue on the east to Memorial Highway on the west, and thence to the Pinellas county line. He declared that they have already secured a 66-foot right of way from Nebraska avenue to Memorial Highway. They were informed that this road has no preferential status west of Tampa and were advised to present their request to the next session of the Legislature for appropriate action.

Glades County—Road 29

Mr. J. H. Peebles of Glades county directed attention to Chapter 13846 of the Laws of 1929, which authorizes and directs the Department to construct the extension of State Road 29 from Indian Prairie Canal to the Kissimmee river. He was informed that this road will be started as soon as possible, probably within the next sixty days.

Levy County—Road 160

Mr. A. F. Knotts, of Yankeetown, presented to the Department a request that when the survey of State Road 81 is made, that the route of Road 160 be also surveyed.

On motion of Mr. Shands, seconded by Mr. Bentley, the following resolution was adopted:

BE IT RESOLVED, That this Department do proceed to survey and locate the route for State Road No. 160.

Manatee County

Messrs. J. P. Harllee, J. H. Young and Wm. J. Kirkhuff, members of the Board of County Commissioners of Manatee county, presented to the Department a request that the State take over for maintenance what is known as the Arcadia Road (State Road 161) and the Parrish-Wauchula road (State Road 32). They were advised that their request would be taken under consideration.

Okeechobee County—Road 29

Hon. A. W. Young, executive secretary of the Board of Commissioners of the Everglades Drainage District, stated that at a meeting of his board, held last week, they voted to cooperate with the Road Department in a determination of the cause of the flood situation which has developed on Road 29, north of Okeechobee, and that representatives of his board will be glad to meet with representatives of the Department at a convenient time.

Polk County

Messrs. Reid Robson, J. W. Foley and J. O. Singley, members of the Board of County Commissioners of Polk county, presented the following requests:

1. That the Department construct Road 17 between Plant City and Auburndale as early as possible.
2. That there be an early letting of the contract for the construction of Road 2 in Polk county, from Bartow south.
3. That the Department survey and locate the road between Bartow and Winter Haven.
4. That the Department consider taking over for maintenance the road between Haines City and the Osceola county line.

On motion of Mr. Shands, seconded by Mr. Graham, the following resolution was adopted:



BE IT RESOLVED, That the Department do proceed to survey and locate State Road 2 between Bartow and Winter Haven.

The delegation was informed that their other requests would be given consideration later during the present meeting.

State Road 30

The same delegation, supplemented by J. E. Worthington and representatives from Indian River, Osceola and Polk counties, appeared before the Department to ask the present status of the Department's program with reference to State Road 30, and to ask that the program be continued without interruption. The delegation was informed that the Department has taken over for maintenance that stretch from Vero Beach to the Kissimmee river, with an allowance of \$25,000 for betterment. From the Kissimmee river west no part is as yet under State maintenance, and the road west from Frostproof has not been definitely located.

Hendry County—Road 25

Mr. H. A. Rider, of LaBelle, appeared before the Department to urge that the construction of Road 25 be pushed as rapidly as possible. He was informed that the Department will let a contract in July for the first eleven miles from the Palm Beach county line towards LaBelle.

Santa Rosa County—Road 53

Mr. Harry W. Thompson urged the Department to place convicts on the construction of Road 53 in Santa Rosa county. He was informed that Santa Rosa county early in the year had stated that it would make available to the Department the proceeds of \$100,000 of time warrants (not less than \$95,000), and the company engaged in the construction of the bridge across Escambia Bay had stated that it would purchase these time warrants from the county. This

promise not having been fulfilled, the Department is not in a position to proceed with any work on Road 53.

State Road 23

Mr. Samuel W. Getzen, of Sumter county, and Messrs. Geo. H. Wilder and J. T. Lowe, of Hillsborough county, presented to the Department a request that State Road 23, between Plant City and the Sumter county line be taken over for maintenance by the State. This request was taken under advisement.

Mr. Getzen requested that the surveyors now engaged in locating State Road 23 be continued on that work until they shall have surveyed the line from Dade City to Plant City. He was assured that this will be done.

Award Of Contracts

The Department proceeded to a consideration of the bids received on June 6, 1930, for the construction of certain projects and the purchase of certain supplies. Whereupon, on motion of Mr. Shands, seconded by Mr. Hills, the following resolution was adopted:

WHEREAS, This Department, after due advertisement, on June 6, 1930, received bids for the construction of certain projects and for the furnishing of certain materials and supplies, as hereinafter listed; and

WHEREAS, The firms and individuals hereinafter mentioned were and are declared to be the lowest responsible bidders therefor. Now, therefore,

BE IT RESOLVED, That contracts be and the same are hereby awarded for the construction of such projects and for the purchasing of such materials and supplies as follows, to-wit:

Project 750—Road 14—Gilchrist and Alachua

counties—Broken stone base No. 2—

L. M. Gray, Gainesville \$99,942.02

(Turn to Page 5)



Florida Highways

Published Monthly

Official Publication of the State Road Department

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(*Official Residence, Tallahassee*.)

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MALLIE MARTIN, *Crestview*
GEORGE B. HILLS, *Jacksonville*
ERNEST R. GRAHAM, *Pensacola*
KARL ROESCH, *Tallahassee, Secretary*

} Members.

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Counties—Charlotte, Desoto, Hardee, Highlands, Hillsborough, Manatee, Osceola, Pasco, Pinellas, Polk, Sarasota.

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B. A. Meginniss, Attorney for the Department.
Editor and Business Manager.



A CALIFORNIAN SAYS A GOOD WORD

A Californian is sometimes generous enough to say a kind word about Florida, and Chester Powell writes the following in the Oakland, Cal., Tribune.

"Everywhere in Florida are good roads—One of the extravagancies, perhaps, of the boom, but they are a delightful luxury in a summer country, and they are partly paid for by the gasoline tax, in which the tourist automatically and properly share. So you can motor all over Florida, in great comfort, with never a hillside and scarcely a slope to affright you. Through endless miles of scrub oak and stunted pine, across cypress swamps and palmetto jungle; past hundreds of lakes, each with its peculiar charm; through restful old southern towns and hectic neo-Spanish and pseudo-Moorish boom developments, to all the beaches from Daytona to Miami and, if you like, on to Key West and Cuba. Florida presents a thousand attractions to its army of winter tourists."—Tallahassee Democrat.

The heartfelt thanks of a long-suffering motoring public should go out to the State Road Department for eliminating those annoying "thank you, marm" bridges on State Road No. 1 near Jacksonville. It is no longer necessary to reinforce automobile tops when riding on this highway and the wear and tear on necks is greatly relieved.—Tallahassee Democrat.

Not His Lead

"Deacon White," asked Parson Jackson softly, "will you lead us in prayer?" There was no answer. "Deacon White," (this time a little louder), "will you lead?"

Still no response. Evidently the deacon was slumbering. Parson Jackson made a third appeal and raised his voice to a high pitch that succeeded in arousing the drowsy man. "Deacon White, will you lead?"

The deacon in bewilderment rubbed his heavy eyes and announced: "Lead yourself—I just dealt."

Elected By Bullet

The defeated candidate in Mexico never asks for a recount. He demands that the election be shot over again.—Everybody's Weekly.

A bricklayer said to a foreman on a new job: "I'd like to work here, but I can't find a place to park my car."

The foreman replied: "I guess you won't do. This is a high-class job and we want only bricklayers who have chauffeurs."

First Suburbanite: How far do you live from town?

Second Suburbanite: Exactly ten gas stations, twelve hot dog stands, eight sandwich shacks, and two hundred and thirty-nine billboards.

"Papa, what do you call a man who drives a car?"
"It depends on how close he comes to me."

TRANSACTIONS OF DEPARTMENT MEETING

(Continued from page 3)

Project 769—Road 5—Lee County—Approach to Caloosahatchee Bridge—	Fred D. Beasley, Tampa	24,535.13
Project 669-Y—Road 27, Collier County—		
Surface treatment, using Florida rock—	Fred D. Beasley, Tampa	20,291.36
Project 767—Road 10—Bay County—		
Treated timber bridges—	J. U. Fletcher, Crestview	683.12
Project 766—Road 10—Bay County—		
Treated timber bridges—	Fla. Bridge & Construe. Co., Orlando	4,055.89
Project 688—Road 10—Bay County—		
Treated timber bridges—	R. J. Arrington & Son, DeFuniak Spgs.	360.15
Project 870—Road 143—Palm Beach County—		
Treated timber bridges—Central Florida Construction Co., Green Cove Spgs.....		7,991.15
Project 733—Road 33—Walton County—		
8,000 gals. TC-2—Barrett Company.....		864.00
12,000 gals. Oil Asphalt—Mexican Petroleum Corporation		667.20
1,000 tons slag—Woodstock Slag Co.....		2,375.00
Project 756—Road 19—Marion County—		
1,587.5 tons Brooksville rock, delivered to Emathla—		4,762.50
Florida Crushed Stone Co., Tampa.....		
240.1 tons standard rock, delivered to Ocala—		912.38
Standard Rock Co., Morriston.....		
1,173.1 tons standard rock, delivered to Williston—		4,199.69
Standard Rock Co., Morriston.....		
70,000 gals. Oil Asphalt—The Texas Co.		4,025.00
On motion of Mr. Shands, seconded by Mr. Graham, the Department was adjourned until 2:30 o'clock P. M.		

AFTERNOON SESSION 2:30 O'CLOCK

Present as at morning session.

Award of Contract on State Road 20

Mr. Carl A. Robinson, of the Florida Basic Rock Company, appeared before the Department with reference to the bid submitted by Consolidated Paving Company on Projects 500-C, 500-D and 515, State Road 20, and his remarks were supplemented by Mr. M. B. Hutton.

Mr. A. M. Lewis, of the Marianna Lime Products Company, appeared before the Department with reference to the bid submitted by his company on said projects, and Mr. McVay Lindsey also addressed the Department on the same subject.

On motion of Mr. Hills, seconded by Mr. Shands, the following resolution was adopted:

WHEREAS, This Department on June 6 received bids for the construction of a lime rock base on Projects 500-C, 500-D and 515; and

WHEREAS, Marianna Lime Products Company was and is hereby declared to be the lowest responsible bidder therefor; now, therefore,

BE IT RESOLVED, That the bid of Marianna Lime Products Company in the sum of \$298,375.32 be accepted, subject to the said Marianna Lime Products Company—

(1) Furnishing satisfactory evidence to the Board that it has available an adequate supply of rock which will meet the requirements of the specifications, and

(2) Furnishing satisfactory evidence to the Board that it can reasonably be expected to initiate the work in such time and to so prosecute it as to assure completion within the period of time therefor provided in the specifications; and that the Board reserve the right to reject the said bid at its discretion in the event a satisfactory showing in the above matters is not made.

Hillsborough County—Road Signs

Mr. Peter J. Van Geyt, secretary-manager of the Tampa Motor Club, appeared before the Department and requested that the markings on State roads through the towns and cities, with particular reference to exits and entrances, be improved. He was informed that the Department is purchasing this year double the amount of Federal and State route signs which it has heretofore installed.

CHAIRMAN'S REPORT

The chairman submitted his regular report, which is in the words and figures following, to-wit:

To the Members of the State Road Department:

Gentlemen—Since our meeting last month, your Chairman has been endeavoring to close the deal with Taylor county whereby the county will transfer to the Department \$116,000 of county bonds as its contribution to the construction of Project 745, Road 19, from Perry north to the Madison county line. Contract for transfer of these bonds has been entered into, and the bonds will be delivered to the Road Department as soon as the bond attorneys have approved. The State treasurer will buy \$50,000 worth of these bonds, and this done, by agreement the Department will then proceed with the hard-surfacing of Project 795.

Walton county has turned over to the State Road Department the \$50,000 it had of its bond funds as Walton's contribution towards construction of the bridge across the Choctawhatchee river on State Road No. 10. At this time a bill is before the Congress, passage of which will allow the War Department to issue permit for construction of the bridge.

The Federal Bureau has approved the payment to the State Road Department of approximately \$135,000 as the Federal government's part of the cost of restoring Federal aid roads which were damaged by floods. We have not had official notification as to whether this will be the total of government contribution to this restoration work.

Plans have been cleared so that the Department can proceed to advertise for bids to be opened and contract let in July on the following Federal aid projects:

Project 66, Road 5—Myakka river bridge.

Project 75, Road 27—Gordon river bridge.

Project 62-D, Road 24—Hard-surfacing from Holopaw to Brevard county line.

Balance of the Kissimmee-St. Cloud project, Road 24, for hard-surfacing.

It is the Chairman's plan also to advertise the following State projects:

Project 715-B, Road 28—New River bridge

Project 806-A, Road 25, from Palm Beach county line westward in Hendry county.

Sincerely yours,

ROBERT W. BENTLEY, Chairman.

Hillsborough County—Road 5

The Department took under consideration the request made at the morning session, that its proposed location of Road 5 be adhered to and that no overhead crossing be constructed near Bruen. No action was

taken on this matter, pending the preparation of formal plans.

Manatee County

The Department having considered the request of a delegation from Manatee County that the state take over for maintenance the Arcadia and the Parrish-Wauchula roads in said county, the Chairman was requested to look over this situation and make a report of the feasibility and advisability of complying with the request.

Polk County

The Chairman was requested to inform the authorities of Polk County that it can not grant the request presented at the morning session that the state take over for maintenance the road between Haines City and the Osceola County line, this matter having heretofore been disposed of.

Pasco County—Road 23

The Department having under consideration again the request submitted by Messrs. Samuel W. Getezen, J. T. Lowe and Geo. H. Wilder, that the state take over for maintenance Road 23 in Pasco and Hillsborough counties, the following resolution was, on motion of Mr. Shands, seconded by Mr. Graham, unanimously adopted:

BE IT RESOLVED, that this Department do take over for maintenance State Road 23 in Pasco County on condition, however, that the county shall furnish and deliver to the Department within a reasonable length of time a 66 foot right of way on the present location of same.

Road 27—Tamiami Trail—Drainage

The Chairman presented to the members a letter from the State Highway Engineer stating that the Southern Drainage District has recently constructed three new canals which do not join on with the Department's existing bridges. The Engineer declares that due to the drainage condition on the Tamiami Trail he recommends that the Department construct two standard 15 foot spans on the Trail at each new location indicated on a sketch attached to his letter, to provide additional drainage west of the dyke which is now being repaired by the Department. This, he reported, would represent six 15 foot spans or a total of 90 feet additional opening at this time, which would cost approximately \$50.00 per lineal foot, or a total cost of \$4500.00.

On motion of Mr. Bentley, seconded by Mr. Shands, the following resolution was adopted:

BE IT RESOLVED, that the recommendation of the Engineer be and the same is hereby adopted, and that there be and there is hereby appropriated out of the emergency fund the sum of \$4500.00, or so much thereof as may be necessary to carry out the recommendation of the Engineer.

Road 27—Collier County—Drainage

There was presented to the Department a resolution adopted by the Board of County Commissioners of Collier County, calling attention to an alleged drainage situation in that county and requesting action by the State Road Department and the Board of Commissioners of Everglades Drainage District to prevent further damage. No action was taken on the request, pending receipt of a communication from the Drainage Board setting a time for conference on the subject.

Taylor County—Road 19

The Chairman reported to the members that he has entered into formal agreement with Taylor County covering the transfer to the Department of \$116,000.00 of bonds for the surfacing of State Road 19, and read to the members the agreement so executed.

On motion of Mr. Shands, seconded by Mr. Graham, the following resolution was adopted:

BE IT RESOLVED, that the action of the Chairman in executing the agreement with Taylor County be and the same is hereby approved, which said agreement is in the words and figures following, to-wit:

THIS AGREEMENT, made this 24th day of May, A. D. 1930, between the State Road Department of the State of Florida, hereinafter referred to as the Department, and the Board of Commissioners of Taylor County, Florida, hereinafter referred to as the Commissioners, WITNESSETH: That

WHEREAS, the County of Taylor has available of an authorized bond issue \$116,000.00 par value of road bonds, to be used in the construction of that part of State Road 19 between Perry and the Madison County line; and

WHEREAS, it is desired by the Commissioners to transfer said bonds to the Department to aid in the construction of said road under the provisions of Chapter 8553 of the Laws of Florida of 1921, Section 1662 Complied General Laws of 1927, and the Department being willing to accept said aid under the conditions specified in said Chapter,

NOW, THEREFORE, BE IT AGREED as follows:

1. The Commissioners agree to turn over, transfer and deliver to said Department from its duly authorized Road Bonds heretofore voted at an election held November 24, 1925, in the sum of \$1,500,000.00, \$116,000.00 par value of said bonds, said \$116,000.00 being of the denomination of \$1,000.00 each, numbered from 1101 to 1216 inclusive, dated April 1st, 1930, payable to bearer January 1, 1941, bearing interest at the rate of five (5) per cent per annum, payable semi-annually on July 1st and January 1st, principal and interest being payable at Guaranty Trust Company, in New York, New York, or at the First National Bank of Perry, Florida, Perry, Florida, or at the Perry Banking Company, Perry, Florida, the said proceeds of the sale of said bonds to be used by the Department only in the construction of the road as hereinbefore specified, providing that not exceeding \$7,500.00 per mile of said bonds shall be spent in constructing said highway which has been duly designated by the Legislature as a part of the system of State Highways.

2. The Department agrees that if and when said bonds amounting to \$116,000.00 have been transferred, turned over and delivered to said Department as aforesaid, it will construct said road and bridges incidental thereto, in a good substantial workmanlike manner, providing a standard form of finished pavement according to the specifications of the State Road Department. The actual cost of construction of said road to be not less than the par value of said bonds, with interest thereon from the date of delivery thereof to the Department.

3. The Department agrees to expend and use and employ as much or more than the par value of said bonds in the constructing of said road in said County



of Taylor, in accordance with said specifications, as may be necessary.

4. The Department agrees that it will use, expend and employ the proceeds of said bonds amounting to \$116,000.00 solely and only in the construction of said road, and that it will supplement the same with sufficient state funds to complete the paving of said road, and that its expenditure on said road of the proceeds of said bonds and state funds will equal or exceed the par or face value of said bonds, so transferred and delivered.

5. It is mutually agreed that if the actual cost of constructing said road in said county shall be less than \$116,000.00, the Department will expend the balance of said sum in hard-surfacing other State roads in said county as shall be agreed upon by and between the Department and said Commissioners.

6. It is further agreed that the Department, from the proceeds of the sale of said bonds to be turned over to it, will pay all incidental expenses necessarily incurred in making sale thereof, but the Department shall not be required to pay any part of the expenses of printing and engraving said bonds, nor of procuring the opinion of a bond attorney as to the validity of same, it being understood and agreed that Taylor County will furnish, at its own expense, the opinion of a bond attorney and will bear the expense of printing and engraving said bonds.

7. It is further understood and agreed that in the event that said Department shall not make sale and delivery of the said bonds prior to July 1st, 1930, or any such subsequent interest period, the interest coupons attached and maturing on said July 1st,

1930, or such subsequent interest date, shall be clipped and eliminated from such bonds; the intent hereof being that in no event shall there be offered for sale the interest accrued on said bonds for a period longer than six months.

IN WITNESS WHEREOF the Department has caused this instrument and one other instrument of like tenor and date to be executed in its name and behalf by its Chairman, and the Commissioners of Taylor County, Florida, have executed this one instrument and one other instrument of like tenor and date, this 24th day of May, A. D., 1930.

STATE ROAD DEPARTMENT OF
FLORIDA (Seal)

By Robert W. Bentley,

Attest: Karl Roesch, Chairman.
Secretary.

BOARD OF COMMISSIONERS OF
TAYLOR COUNTY, FLORIDA

By B. H. Lindsey,

Attest: James R. Jackson, Chairman.
Clerk

(Seal)

Commendation by Junior Chamber of Commerce

The Chairman presented to the members a letter from Truman Green, President of the Florida Junior Chamber of Commerce, with which was enclosed a resolution adopted by that organization commending the policy of the Department in emphasizing the importance of the use of Florida products in state work. The Chairman was requested to acknowledge receipt of this letter and to express through Mr.



Green to his organization the appreciation of this Department.

Lighting Manatee River Bridge—Project 593

The Chairman presented to the members a letter from the Kirby Stewart Post No. 24 American Legion, of Bradenton, stating that that organization has undertaken the project of installing necessary lighting fixtures and cables on the Manatee River Bridge, and asking that the Department contribute 122 lamp posts or standards to the project. The Chairman was requested to express the appreciation of this Department to the organization for its public spirited enterprise, and its regret that it can not legally expend funds for the purpose requested.

Testing Materials—Nutting Agreement

There was presented a letter from the State Highway Engineer, addressed to the Chairman, recommending that the arrangement between the Department and H. C. Nutting Company for testing materials be terminated upon thirty days' notice from the Department to said company. The Engineer declared that the original proposal fails to carry prices for various miscellaneous testing and that it will be necessary for the Department to have this done by commercial testing laboratories. It was also pointed out that the Nutting proposal carries prices for numerous tests which are now being made by the Department itself, and that the present arrangement might indicate that the Nutting Company would be entitled to some of this work, which, however, is being more economically done at the Department's own laboratory. For this reason the Engineer recommended that the Nutting agreement be terminated upon such thirty days notice and that the Department prepare a correct list of miscellaneous tests which it proposes to let out to commercial laboratories, as per new proposals from various laboratories for this work.

On motion of Mr. Hills, seconded by Mr. Graham, the following resolution was adopted:

BE IT RESOLVED, that the recommendation of the State Highway Engineer be and the same is hereby adopted; and that the Chairman be and he is hereby requested to notify H. C. Nutting Company that at the expiration of the thirty days from the date of such notice, the present arrangement with said company will be terminated.

Purchase of Tires

The Secretary of the Department made a report to the members with reference to the purchase of tire requirements of the Department, and recommended that in future the Department advertise for bids for such tire requirements in accordance with plan which is in vogue in many of the states of the Union and which contemplates receiving bids from the standard tire manufacturers of the country.

On motion of Mr. Hills, seconded by Mr. Shands, the following resolution was adopted:

BE IT RESOLVED, that this Department does adopt the general plan recommended by the Secretary covering the purchase of tires for the Department, and that the advertisement be inserted for bids for its tire requirements for the last six months of 1930, such bids to be returnable July 10, and the advertisement to be in the form recommended by the Secretary at this meeting.

Award of Contracts Approved

On motion of Mr. Shands, seconded by Mr. Graham, the following resolution was adopted:

WHEREAS this Department on May 27, 1930 did receive bids for the furnishing of the materials and supplies hereinafter listed; and

WHEREAS the firms and individuals respectively named were and are hereby declared to be the lowest responsible bidders therefor, Now Therefore,

BE IT RESOLVED, that the action of the Chairman in awarding contracts for the purchase of such materials and supplies be and the same is hereby approved and confirmed, which said contracts are as follows, to-wit:

Materials

Proj.	Road Material	Bidder	Price
868	5 Reinf. Conc. Pipe, Shearman Concrete Pipe Co.		\$ 720.00
52	1 Reinf. Conc. Pipe, Cary & Company		1,162.00
832	10 Treated Timber and Piling, Pensacola Creosoting Co.		8,055.48

Road Signs

725	Steel Route Markers, J. P. Benjamin	\$ 391.50
2000	Steel Caution and Warning, J. P. Benjamin	2,120.00
900	Cast Iron Project Markers, C. I. Capps Co.	630.00
1200	Cast Iron Arrows, C. I. Capps Co.	480.00

Mule Feed

Howard Grain Co., Jacksonville—Oats, Corn and Bran for Camps 4, 8, 30 and 33	\$1,456.50
Lewis Bear Co., Pensacola—Oats, Corn, Bran for Camps 1, 12, 27, 31, 32, 34 and Hay for 27 and 31	2,789.75
R. P. Atwood Co., St. Louis—Hay for Camps 1, 4, 8, 12, 30, 32, 33 and 34	2,188.00

Dixie County Time Warrants

The Chairman reported to the members that pursuant to an advertisement two bids have been received for \$19,000.00 of Dixie County Time Warrants, one from J. H. Scales, offering 85c on the dollar for \$5,000 of said warrants maturing July 1, 1930; \$7,000 maturing July 1, 1931, and \$7,000 maturing July 1, 1932, with interest coupons due July 1, 1930, detached. The other bid, from Perry Banking Company, is for 92c on the dollar for the same maturities with all coupons attached.

On motion of Mr. Shands, seconded by Mr. Graham, the following resolution was adopted:

BE IT RESOLVED, That this Department will reject all bids for \$5,000 of Dixie County Time Warrants due July 1, 1930, and that the Chairman be and he is hereby authorized to negotiate for a private sale of the \$14,000 of said warrants maturing July 1, 1931, and July 1, 1932.

Project 669-C—Road 27

On motion of Mr. Graham, seconded by Mr. Shands, the following resolution was adopted:

BE IT RESOLVED, That the Chairman be and he is hereby authorized to award to the lowest responsible bidder the contract for the construction of Project 669-C, Road 27, bids on which will be received by the Department on June 24th.

Assistant To Secretary

Mr. Shands stated to the members that it was his belief that additional assistance should be provided for the Secretary of the Department in order that he may more promptly and efficiently do the work, it being his opinion that the present incumbent has inaugurated a number of plans which are saving considerable money for the Department.

On motion of Mr. Shands, seconded by Mr. Hills, the following resolution was adopted:

BE IT RESOLVED, That the Secretary be and he is hereby authorized to employ an assistant, subject to the approval of the Chairman of this Department, and that the salary of said assistant be paid by using such portion as may be necessary of the funds appropriated for the employment of a purchasing agent.

Road 4—Bayard To Jacksonville

Mr. Hills, member of the Department, made inquiry as to the status of Road 4, between Bayard and South Jacksonville. The State Highway Engineer stated that the survey map has been nearly completed, and when finished will be turned over to the County Commissioners of Duval county for the securing of the necessary right of way.

San Sebastian River Bridge—Road 4

In response to an inquiry from Mr. Hills, Mr. Dun-

can, the State Highway Engineer, stated that the routes which have been offered through St. Augustine leading to the San Sebastian river bridge have not been found satisfactory and that the Division Engineer is at present striving to work out a better location.

Expense Accounts Approved

On motion of Mr. Bentley, seconded by Mr. Shands, the following resolution was adopted:

BE IT RESOLVED, That the expense accounts of the members be approved, as follows:

R. W. Bentley	\$ 34.75
R. W. Bentley	17.50
E. R. Graham	134.68
G. B. Hills	68.27
Mallie Martin	31.10
Mallie Martin	79.55
W. A. Shands	10.94
W. A. Shands	53.64

Road 3—Trout River to Jacksonville Municipal Airport

The State Highway Engineer stated that he can prepare plans for the widening of State Road 3 between Trout River and the Jacksonville Municipal Airport within a short time if the same is constructed as a State project, but if it is made a Federal-aid project some time will necessarily be required in getting the necessary approval.

On motion of Mr. Hills, seconded by Mr. Shands, the following resolution was adopted:

BE IT RESOLVED, That this Department do proceed to the widening of State Road 3 between Trout River and the Jacksonville Municipal Airport as a State project.

Project 659—Road 3

Mr. W. A. Shands, member, and B. A. Meginniss, attorney for the Department, who were by resolution at the last meeting appointed to estimate damage done to the property of H. B. Garrett by the Department's construction of State Road 3 in Orange Park, made their report recommending that the Department make settlement with Mr. Garrett in the sum of \$2,000.00.

On motion of Mr. Hills, seconded by Mr. Graham, the following resolution was adopted:

BE IT RESOLVED, That the recommendation of Messrs. Shands and Meginniss, with reference to settlement of the H. B. Garrett claim be and the same is hereby approved.

BE IT FURTHER RESOLVED, That the Chairman be and he is hereby authorized to offer to Mr. Garrett the sum of \$2,000 to be accepted by him in full settlement of all claims against the Department.

Resolution of Thanks

On motion of Mr. Bentley, seconded by Mr. Graham, the following resolution was adopted:

BE IT RESOLVED, That the thanks of this Department be and the same are hereby extended to the Chamber of Commerce of the City of Tampa, and to the Hon. D. B. McKay, Mayor, to the press of the City of Tampa, and to those other officers and citizens who have extended courtesies to the Department at the present meeting.

BE IT FURTHER RESOLVED, That the Secretary be and he is hereby requested to convey these thanks to the organizations and individuals mentioned.

On motion of Mr. Graham, seconded by Mr. Shands, the Department was adjourned to meet at Tallahassee, July 17, 1930.

Prequalification in South Carolina

New Plan to Go in Effect July 1st—Contractors to be Classified and Rated—Limits Set Up in Published Notice from South Carolina Department

The State Highway Commission of South Carolina, at its regular meeting, April 25, 1930, unanimously passed a motion establishing the following regulations in accordance with the provisions of an Act of the General Assembly of 1930, entitled: "An Act Authorizing the State Highway Commission to fix Eligibility Requirements for bidders on State Highway Work":

1. Effective July 1, 1930, all persons, firms or corporations eligible to bid on road or bridge construction work of the State Highway Department shall have qualified as herein required. No bids for such work will be read or considered by the State Highway Department after that date, except from persons, firms or corporations that have so qualified. Those who have qualified will be listed by the department as eligible contractors and each contractor will be given a rating designed to indicate the kind and quantity of work which he is eligible to be awarded. Eligible contractors will be classified as *general contractors*. These may be awarded any class of work ordinarily undertaken by the Highway Department: *grading contractors*—these may be awarded projects that include grading and minor drainage structures; *paving contractors*—these may be awarded projects that include grading, minor drainage structures and paving; and *bridge contractors*—these may be awarded projects that consist of bridges and other similar structures. Each contractor who qualifies for any one of the four classifications will be rated according to the quantity of work that his experience, liquid capital and responsibility record would in the judgment of the Highway Department warrant him in undertaking.

Classification

2. Classifications and ratings will in each case be based on a verified showing of experience, liquid assets, responsibility record, and available equipment. A pre-requisite to classification and rating will be a sworn statement furnished the department by the applicant, this statement to be made on a form provided by the department and to carry all information required by the department. Contractors may be classified immediately upon presentation of the required sworn statement, but in no case will be rated as eligible to undertake construction work for the department of a value greater than \$10,000.00 until the lapse of thirty calendar days after the date upon which the formal statement is presented; that is to say that the department may award construction contracts not exceeding \$10,000.00 in value to low bidders furnishing the required statements as to experience, capital and record of responsibility, regardless of whether such bidders have been previously classified and rated as qualified contractors. But in the case of contracts exceeding \$10,000.00 in value, bids will be received only from contractors who have been formally qualified and whose classification and rating shall show them to be eligible for undertaking the work involved.

3. The sworn statement called for in paragraph (2) above shall be made up by filling in the department's standard questionnaire form, and shall show:

(a) The experience of the applicant in handling the character of work for which he desires to become an eligible contractor.

(b) The liquid assets of the applicant available for carrying on construction work.

(c) A description of the equipment owned by the applicant suitable for carrying on such work.

(d) A list of references, giving names of responsible persons having knowledge of the applicant's character, experience and capabilities.

(e) Such other information as may be called for in the department's form.

Rating of Contractors

4. Qualified contractors will be rated according to the following rules:

(a) Grading contractors and paving contractors must show liquid assets at least equal to 15 per cent of the capacity or eligibility rating that will be assigned to them; that is to say, no grading or paving contractor will be eligible to bid on projects of a value so great that the contractor's liquid assets will not be at least equal to 15 per cent of the contract amount.

(b) Bridge contractors must show liquid assets at least equal to 25 per cent of the capacity or eligibility rating that will be assigned them. General contractors will be rated separately for each road and bridge work.

(c) In addition to the liquid assets necessary to be shown for a given capacity rating, contractors must also show that they possess and have available appropriate and sufficient equipment to perform satisfactorily the kind and quantity of work contemplated by the classification and rating, or in lieu of actual equipment on hand, the showing of liquid assets, together with verified credit, must be sufficient to provide the necessary equipment in addition to meeting the percentage requirements stated above.

(d) The experience showing made by qualified contractors will also affect their capacity ratings. Contractors who have performed work for the South Carolina State Highway Department in a satisfactory manner and who have demonstrated their responsibility to the satisfaction of the department will be assigned capacity ratings without further limitations than those indicated by Paragraphs a, b and c above, the classification in each case to be determined by the quality of work hitherto performed.

Contractors who have gained their experience and established their responsibility on work for other State Highway Departments will be given capacity ratings commensurate with the magnitude of such work performed by them as verified by official certificates of the other State Highway Departments concerned. The classification in each case will be appropriate to the experience showing.

Contractors who have gained their experience and established their responsibility on work for other agencies than State Highway Departments will be given capacity ratings according to their classifications, as follows:

Bridge contractors, not exceeding . . . \$ 25,000.00

Grading contractors, not exceeding . . . 50,000.00

Paving contractors, not exceeding . . . 100,000.00



General contractors to be rated separately for the three classes of work.

5. No applicant who has failed to carry out any contract awarded him by the State Highway Department of South Carolina will be qualified as eligible in any classification. This requirement, however, shall not serve to bar persons having so failed from serving as employees or otherwise eligible contractors.

6. Classification and capacity rating of qualified contractors will be fixed by the department subject to the foregoing limitations, the rating in each case to be limited by the requirement affording the maximum restriction.

Each contractor qualifying under these rules will be furnished a notice of his classification and rating, and bids from him will be read and considered only for contracts within the limitations thus fixed. Contractors whose capacity ratings are limited by the amount of their net liquid assets may by additional showing secure modifications in their ratings at any time up to twenty-four hours before submitting bids on any particular project. In like manner, whenever the department desires to reopen the question of capacity rating for any particular contractor, additional sworn statements may be called for and the contractor's rating will be modified to conform with the new showing, provided that should any contractor fail to comply with the department's request for additional sworn statements within fifteen days after

they are called for, then the department may change his capacity rating or declare him ineligible pending receipt of the new statement.

7. Regardless of capacity rating, no contractor whose progress on work under way is not satisfactory to the department will be awarded additional work. Also, contractors whose conduct of their work shows incompetency or irresponsibility may be disqualified without notice.

8. No contractor will be qualified until after he has secured a "Bidder's License," as required by law.

9. An eligible list will be kept by the State Highway Department showing qualified contractors, their classifications and ratings. Additions to this list will be considered once each month on dates to be fixed by the department. No contractor's name will be added to the list, however, until at least thirty days after he has filed his application for qualification, together with the required sworn statements.

Any contractor or other interested person is invited to appear before the State Highway Commission on May 22, 1930, to criticize or express views on these regulations.

O. P. BOURKE,
Secretary, State Highway Commission.
BEN M. SAWYER,
Chief Highway Commissioner.
—Tennessee Road Builder.

Protection of Railway Grade Crossings

Report Based on Careful Study of Conditions Surrounding Grade Crossings and Highway Intersections

FIVE simple rules for the guidance of motorists at railway grade crossings, and through which it is hoped to reduce the list of fatalities and accidents, are recommended by the Committee on Protection of Railway Grade Crossings and Highway Intersections of the National Conference on Street and Highway Safety in its report presented to the third National Conference on Street and Highway Safety, which was held in Washington on May 27, 28 and 29.

The five rules are:

1. Slow down or stop.
2. Listen and look both ways: when one train passes, another may be coming.
3. Shift to lower gear if necessary to prevent stalling on tracks.
4. Don't try to beat a train over the crossing.
5. Be doubly careful at night or on strange roads.

The committee strongly urges the removal of all obstacles to clear view at crossings and intersections, together with clearly discernible and easily understood signs and signals that warn the approaching motorist of the presence of the crossing.

Emphasis is placed by the committee on the necessity, however, of prudent conduct in approaching and passing over grade crossings, particularly when on strange roads, or in foggy weather, or at night.

The report of the committee is based on a careful survey of the conditions surrounding grade crossings and highway intersections, and the hazard and frequency of accidents. It is pointed out that while new grade crossings should be kept at a minimum and existing crossings separated or eliminated as rapidly as possible, grade separation cannot be depended upon for the ultimate solution of the matter.

What the Survey Shows

In the survey of grade crossings, the committee finds:

1. Accidents at grade crossings are causing 8 per cent of the annual number of highway deaths, estimated at 31,000. Accidents at railway grade crossings for the last three years have averaged 5,781 a year for the last three years, of which 4,399 were vehicles struck by trains, 1,272 were cases where automobiles ran into the side of trains, and 110 involved the occupants of other vehicles or pedestrians on crossings.

2. While more than \$60,000,000 a year for railway grade crossing elimination has been spent in the last three years, the total number of grade crossings, as well as highway intersections, is increasing, due to new highway construction. Separation of grades cannot be counted upon because of the financial cost to solve the problem. Establishment of uniform warning signs and signals, and uniform protective measures, and the education of highway users to prudent use of crossings, is the quickest and most certain remedy, in the view of the committee.

3. Reduction of physical hazards at grade crossings, as well as at intersections, can be facilitated by the construction of practically level and smooth surfaces of road for a distance of 25 to 50 ft. on each side of the tracks, and the approach to the tracks on

grades not exceeding 4 or 5 per cent, as well as the widening of the roadway at the crossings. Railway cars should not be left standing at or near crossings, nor other obstacles, including crops, trees and billboards, so located as to prevent a clear and sufficient view of approaching trains. The committee urges the placing of warning signs and signals in such positions as not to interfere with visibility of the highway users, and the adoption of colors that are easily and plainly discernible.

4. Of the 240,000 grade crossings in the United States, 87.8 per cent are dependent for protection on standard fixed signs. The trend of protection is toward visible automatic signals. A fair division of the cost of installment of automatic signals, as well as the elimination of obstacles to view, is practical and equitable means of facilitating the work of protection. Signs should be placed at adequate distances from crossings, not to exceed 450 feet, to give warning to motorists, while other signs should be placed nearer the crossings calling for a reduction of speed to safe and reasonable limits.

5. Careful study of the traffic flow and condition is necessary to properly protect the crossings by signs and signals, and determine the measures that are adequate for safety at each crossing. At crossings on heavily traveled highways, the responsibility of the motorist for prudence and caution is greatly increased. In addition, the committee urges the installation of wig-wag red light, or alternate flashing red light signals, at such crossings as a further safety measure.

6. Attention is called to the provisions of the Uniform Vehicle Code and Model Municipal Traffic Ordinance, laying down the fundamental rule against reckless driving at crossings, and providing that motorists must keep to the right, and obey the indications of stop-and-go signals, traffic officers, crossing watchmen or crossing gates. Public and school busses and vehicles carrying explosives or inflammables must stop.

7. Special attention of the police to the enforcement of laws and regulations at crossings and highway intersections is suggested. The recommendation is made that in examinations for licensing operators and chauffeurs, tests be made as to the working knowledge of the applicants of rules and regulations governing traffic at grade crossings and road intersections.

8. Despite efforts of the public authorities to eliminate hazards, provide ample warning and control measures, and enforce rules and regulations applicable to grade crossings and highway intersections, the public must be depended upon for voluntary compliance with the rules of proper conduct at such points. The committee says it is of fundamental importance that all laws, regulations, traffic control measures and protection safeguards should be conformed to by the public.

Grade Crossing Accidents Summarized

In going into the accident situation, the committee gives the following summary (Table I) of highway grade crossing accidents on all steam railroads, and

based on statistics of the Interstate Commerce Commission:

Findings of Committee

In an analysis of the figures and statistics relating to the grade crossing accident situation, the committee makes these findings:

1. The number of grade crossing accidents and fatalities has been nearly constant during the past four years. This is in spite of an increase of 20.4 per cent in motor vehicle registrations in the same period.

2. Although the recent trend in grade crossing accidents has been more favorable than that for general traffic accidents, the fact that approximately 2,500 persons annually lose their lives at grade crossings emphasizes the continuing importance and magnitude of the question of crossing protection.

3. For each fatality in grade crossing accidents, there were 3.65 non-fatal injuries, whereas statistics from other sources indicate that for all kinds of traffic accidents, the ratio is approximately 35 serious personal injuries to each fatality.

4. The proportion of accidents in which motor vehicles collided with the sides of locomotives or trains has increased materially. The ratio of fatalities to non-fatal injuries in such accidents, however, is about 1 to 7, while the corresponding ratio is about 1 to 2.2 in struck-by-train accidents.

5. Fatalities to occupants of motor busses indicates a decrease during the past three years, but these statistics relate to accidents on steam railroads only. If electric railways were included, the year 1929 would show at least 20 additional fatalities which resulted from a single collision between a bus and an interurban electric train, and no doubt there were other accidents of this character during the period covered by the tabulation. It should be noted that there were a number of serious bus accidents in the first four months of 1930, two of which alone caused more than 30 deaths.

TABLE I.

	1926	1927	1928	1929
Total accidents	5,862	5,596	5,752	5,912
Total fatalities	4,291	2,371	2,568	2,458
Total non fatal injuries	6,991	6,613	6,666	6,804
Total fatalities and injuries	9,482	8,984	9,234	9,289
Fatalities caused by trains striking, or being struck by trains:				
Pedestrians	293	299	299	307
Passenger automobiles	1,766	1,690	1,820	1,741
Motor busses	15	30	9	7
Motor trucks	281	254	336	337
Others (motorcycles, bicycles, trolley cars, etc.)	136	98	104	93
Vehicles or pedestrians struck by trains:				
Accidents	4,585	4,295	4,357	4,358
Fatalities	2,188	2,078	2,240	2,163
Non-fatal injuries	5,240	4,844	4,688	4,631
Vehicles or pedestrians collided with trains:				
Accidents	1,129	1,205	1,298	1,454
Fatalities	237	259	285	287
Non fatal injuries	1,661	1,701	1,923	2,104
Miscellaneous grade crossing accidents:				
Accidents	148	96	97	100
Fatalities	66	34	43	35
Non-fatal injuries	90	68	55	69

Remedial Measures Discussed

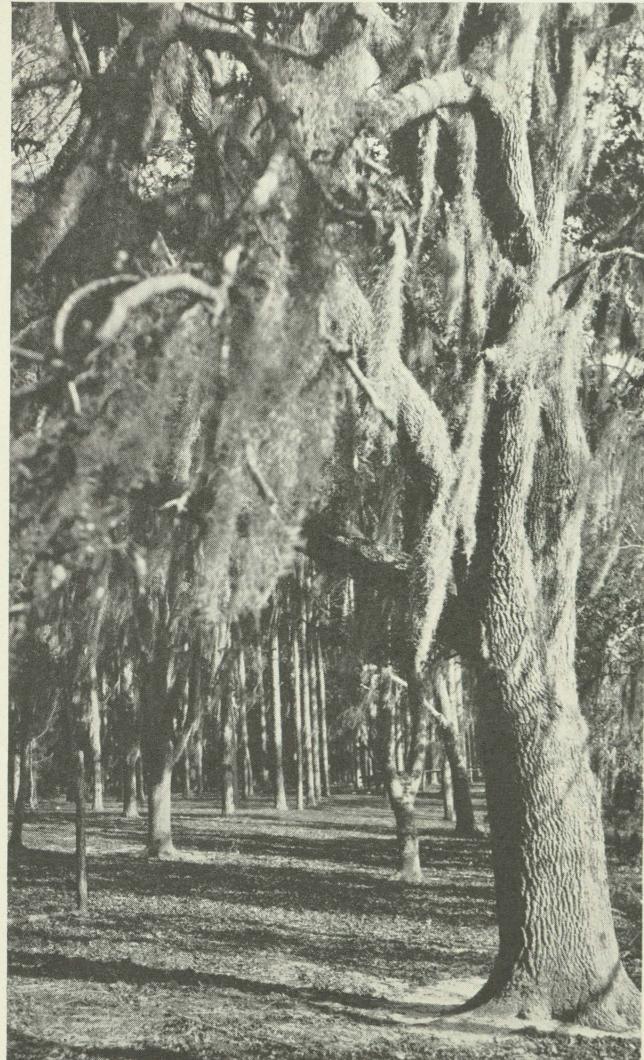
In the discussion of remedial measures in connection with hazards and the risk of accidents at crossings, the committee says:

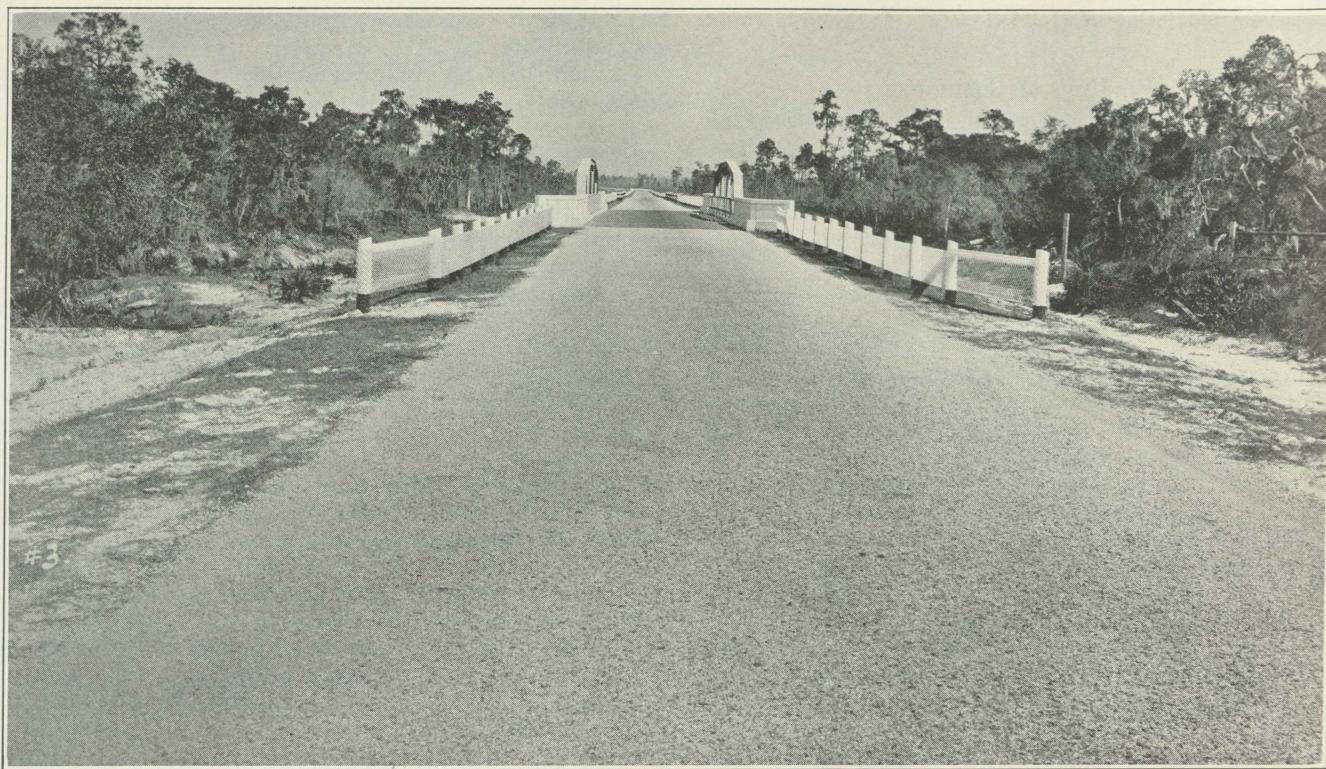
The crossings that are being eliminated are mainly those where the greatest exposure occurs. The same is true of crossings at which protective devices are installed. Hence the aggregate hazard of unprotected crossings is being reduced more than the

figures as to crossings eliminated and protected might indicate.

Expenditures by the railroads for grade crossing elimination have averaged more than \$30,000,000 per year during the past three years. While figures are not available as to the total expended by the public authorities as their share in such work, it is known that this is generally in about an equal amount with the railway contribution. Thus the average total expenditures by the railroads and the public is probably averaging more than \$60,000,000 per annum. The cost of elimination of an average grade crossing is not available, but it ranges from as little as \$25,000 to as much as \$500,000 or more.

A progressive policy should be carried on by the railroads and the highway authorities with respect to elimination. However, as there is a total of about 240,000 highway railway grade crossings in the United States it is obvious that the elimination of all of them by grade separation is economically impossible, at least for the immediate future. Grade separation cannot be counted upon as a principal solution of the problem. Grade separation projects should be carefully selected as to include those which will to the greatest degree reduce hazards and facilitate traffic movement at points of greatest traffic density.





Chief reliance must be placed upon measures for reduction of hazards at crossings remaining at grade, as follows:

The physical hazards at grade crossings to which attention should be directed are those arising from—

1. Layout and conditions of the highway at and on the approaches to the grade crossing.
2. Obstructions of whatever character to clear vision from the viewpoint of the highway user.
3. Lighting conditions at the grade crossing and visibility of the train equipment as seen by the motor vehicle operator.

Principal Physical Hazards that Require Attention

The following are the principal physical hazards requiring attention:

Approach grades—Highway grades adjacent to railroad tracks should be practically level for a minimum distance of 25 feet, preferably 50 feet, on each side of the nearest rail. Beyond those points, if feasible, the approach grade should not exceed 4 per cent for main traveled roads carrying a considerable amount of truck traffic and should not exceed 5 per cent for roads carrying principally passenger traffic. These should be considered as maximum grades and should be reduced whenever practicable.

Road surfaces at crossings—if the road is clear and unobstructed the width of the surface at the crossing should be as wide as the travelable portion of the shoulders. If there is an obstruction in the roadway the width of the roadway surface allowed for each possible lane of movement of the highway leading thereto (including the travelable portion of the shoulders) should be 2 feet more per lane at the crossing than the allowed widths on the roadway. The highways should be widened for a distance of 100 feet on each side of the crossing so that the outside lanes of the roadway shall be the same distance apart as they

are across the railway crossing. That portion of the road surface which is located between the rails and between the tracks should be maintained in as smooth condition for travel as the adjacent road surface.

Sharp turns near crossings—Sharp turns should be avoided at crossings. If unavoidable on account of conditions that may exist, they should be kept as far as possible from crossings, and not less than 250 feet. A curve detracts the attention of the driver from the real danger at the crossing and should be far enough removed so there will be ample opportunity to observe approaching trains after the driver has rounded the curve. Existing sharp turns near crossings should call for a relocation of the highway so as to eliminate this added danger.

Major highway intersections near crossings—Intersections of major highway intersections should be at least 500 feet away from a railroad crossing so as to permit the ultimate separation of grades with the railroad, as well as a separation between the two highways; all others not less than 250 feet.

Obstructions to view—The obstructions ordinarily encountered are: Steep banks, trees and shrubs, standing crops, buildings, parked vehicles, cars stored on sidings, and billboards. To promote safety the driver should be able to observe approaching trains while he is still far enough from the crossing to permit him to decide whether he may safely clear the intersection in front of the train or, if not, to let the train pass in front of him. If it is not possible to provide unobstructed view, obviously greater precautions must be taken to insure full warning to the driver of approaching trains. Billboards and signs other than official traffic signs should not be erected closer to the crossing than a point 150 feet from the advance railway warning sign on the approach side.

Lighting conditions at grade crossings—Where adequate illumination of grade crossings is economically practical it presents definite advantage both in the illumination of the crossing itself, of vehicles on the highway, and of railway equipment on the tracks. Special care should be taken in installing lights at grade crossings that glare is not thrown into the eyes of vehicle operators approaching the crossing, and that the lights aid in the visibility of the crossing signs and signals instead of reducing their visibility by the elimination of contrast, or make less visible the headlight beams of approaching trains. Consideration should be given also to the visibility of rolling stock as affected by automobile headlights or by fixed lights at the crossing.

Safe Driving Practices

In discussing the proposition of what constitutes safe driving practices and restrictions at crossings, the committee says:

Absolute regard for positive visible or audible signals warning that a train is approaching is a fundamental requirement of law and prudent practice. Many crossings are not equipped with such signals, and the highway user is responsible for exercising the greatest circumspection and caution in traversing any railroad crossing.

In its simplest form a grade crossing consists of a single track railroad, with both track and highway straight, on level ground, with no obstructions to a clear view in all directions. In daylight the vehicle operator familiar with the crossing can assure himself by looking in each direction that no train is approaching and that he can continue in safety.

However, in order that his observations up and down the track may be sufficiently thorough to see any approaching train, without undue diversion of attention from the road ahead, and in order that he may not jeopardize himself and other highway users by running at excessive speeds over grade crossings which can seldom be made as smooth as other portions of the highway, he should not in any case traverse grade crossings at a speed in excess of 30 miles an hour.

There are crossings at which, particularly at night, the only way to make sure that no train is approaching is to stop near enough to command a view up and down the tracks. The prudent driver will make it his rule to stop at such points.

Having assured himself that the way is clear, how will the safe driver proceed? One rule will hardly fit all cases. If he has not been compelled to stop, and the crossing is level and smooth, high gear will take him clear of danger in the shortest time. If he has come down to low speed, or has stopped, he must above all things avoid stalling his engine which sometimes occurs as a result of a sharp grade, an uneven crossing, or nervousness caused by the sudden appearance of an approaching train, and should go over the crossing in low or second gear.

If he has the misfortune to stall his engine on the tracks and cannot restart promptly, he should know that, as a last resort, he can generally, by going into low gear and holding his foot continuously on his self starter, let it drive the car forward off the track.

Highways over railroad yards, or the switching approaches thereto, have special hazards, and should be considered in establishing priority in grade separation programs. The safe driver will watch freight cars standing near the roadway, lest they be unex-

pectedly set in motion by a switch engine, and will not relax his vigilance until certain he is over the entire crossing.

Although pedestrians are the victims in grade crossing accidents in a relatively small proportion of such accidents, he has two basic precautions to observe: He must be sure before he crosses each track that the way is clear, and in the case of multiple tracks, he must not permit himself to be trapped in front of one train with nowhere else to go."

Laws and Regulations

In discussing laws and regulations, and their enforcement, at railway grade crossings, the committee points out:

The Uniform Vehicle Code contains several provisions relating specially to railroad grade crossings. One of these is that operators of motor vehicles must keep to the right in crossing railroads. Another is the obviously necessary one that warning signals must be observed. The Uniform Vehicle Code requires that certain vehicles, such as street cars, motor busses, school busses, and trucks carrying gasoline or other inflammables or explosives, must stop at all crossings. This provision is particularly appropriate inasmuch as the operators of such vehicles have special responsibilities to the public, and should be skillful enough as operators to make quite unlikely that the vehicle will stall or run into danger in starting over the crossing.

In some states laws have been passed requiring all motor vehicles to stop at all grade crossings. Such legislation has been vigorously opposed by the motoring public, both because it causes congestion on busy highways, subordinates even the heaviest highway traffic to railroad traffic, forcing stops many times where there is no need for a stop, and because it can be seriously questioned whether stopping at every crossing, and then proceeding across at low speed, does not prolong the hazard and introduce the danger of stalling.

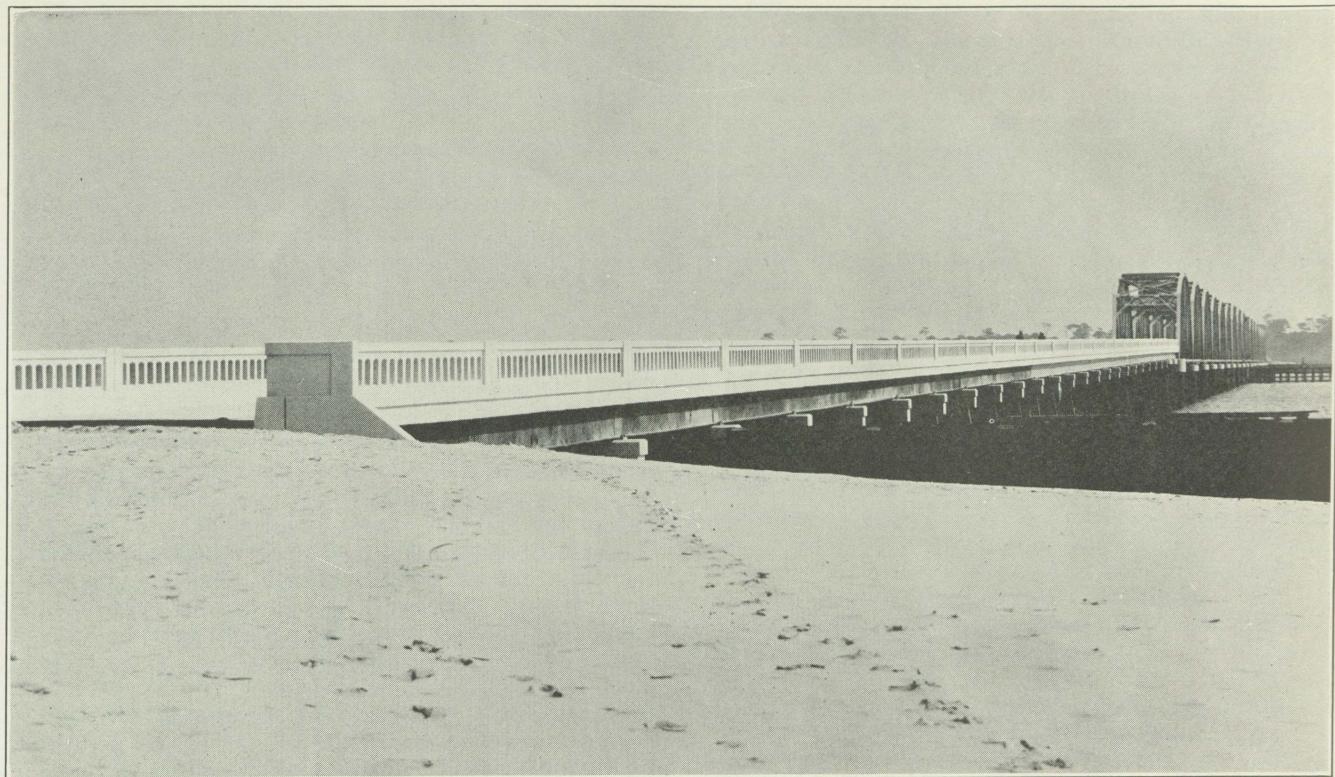
On the other hand, it is evident that there are many crossings at which the only safe course is to stop and see whether a train is approaching.

The National Conference on Street and Highway Safety has emphasized the importance of vigorous and impartial enforcement of all motor traffic laws. Enforcement is inadequate in many, if not most, states and communities, motorists and pedestrians make their own rules; practices are indulged in every day which invite accidents that are avoided only fortuitously. Undoubtedly in many cases the driver who brings himself and his companions to grief at the grade crossing has previously been guilty of many unpunished violations of the traffic laws and regulations. More rigid enforcement all along the line could be expected to reduce materially railroad grade crossing accidents.

Analysis reveals that a large number of drivers do not heed the warning given by the flashing light signals, run through crossing gates, and even disregard the stop sign of the crossing watchman. Not infrequently they run him down and fatally or seriously injure him.

There could well be check-ups of motorist and pedestrian observance of signals at grade crossings. When a motorist crashes through a crossing gate or dashes under one that is being lowered, he is violat-

(Turn to Page 23)



Adopt Speed Law Changes at National Conference

Official Delegates Gather at Washington to Discuss and Approve Committee Reports

THE outstanding accomplishment of the Third National Conference on Street and Highway Safety, attended by delegates from 41 states, the District of Columbia and Canada, and from hundreds of civic and business organizations, was the adoption of a new kind of speed regulation for motor vehicles. This new regulation, which constituted the most important change in the Uniform Vehicle Code, first sets forth this basic rule: Speed must be reasonable and prudent under the existing conditions, and must not be greater than will permit the driver to avoid colliding with any person or vehicle lawfully on the highway. The latter provision is similar to what has been known as the clear course rule.

The Code next sets forth the following "indicated speed limits": 15 miles in passing a school where children are coming or going, or in approaching an obstructed railroad crossing; 20 miles in business districts and also at obstructed street or highway intersections; 25 miles in residence districts, in parks, and at railroad grade crossings where the view is not obstructed; and 45 miles elsewhere. Local authorities may raise these speeds on through highways or where there are no intersections, but may not otherwise change them.

Heavier Fine For Reckless Driving

Police officers are authorized to make arrests for violations of the basic rule first mentioned, regardless of speed, and may also arrest for speed in excess of the indicated limits, but to secure conviction in court, violation of the basic rule must always be shown. However, if a driver is convicted of violating any of the rules of the road set forth in the Code and while com-

mitting such violation is driving faster than the indicated speed limit for the district, then the penalty is increased to the heavier fine or imprisonment provided for reckless driving.

President Hoover, who as Secretary of Commerce called the First and Second Conferences in 1924 and 1926, opened the Third Conference with a brief address in which he said in part:

Hoover Addresses Conference

"Steadily increasing traffic has outrun all measures of safety. It is encouraging to note, however, that in some states and localities, where remedies have been actively applied, the accident increase has been curbed and traffic congestion somewhat relieved. The way has thus been pioneered. But universal improvement can come only gradually and through continuous and combined effort in many different fields on a nationwide scale."

Secretary of Commerce Robert P. Lamont called the Conference to order in the auditorium of the United States Chamber of Commerce at Washington on the morning of May 27 with some six hundred accredited delegates and numerous visitors in attendance. President C. E. Pettibone, of the National Safety Council, was seated on the platform with presidents of other participating bodies.

In his opening address Secretary Lamont called attention to the 31,000 motor vehicle fatalities in 1929 and reminded the audience that the increase in traffic accidents had been smallest in those states which had carried out the recommendations of previous conferences. He said in part:

Compares Death Toll to War

"The reports on automobile traffic come to the headquarters of our federal, state and municipal governments like those of a war conducted on many fronts.

"Fortunately, the large majority of automobile drivers are capable, conscientious and prudent. Otherwise our population would be shortly decimated. Reports from the traffic front leave no doubt as to the seriousness of the situation. But I feel that there is one encouraging fact, that is the evidence of your determination to meet and overcome the problem before us."

Colonel A. B. Barber, of the U. S. Chamber of Commerce, director of the Conference, presented the report of the executive committee which recommended the appointment of a drafting committee to consider in detail the various proposals brought before the conference and render a report thereon at the final session. This program was adopted. The membership of this drafting committee included Miller McClintock, vice president National Safety Council, representing the committee on uniformity; Sidney J. Williams, representing the National Safety Council; F. C. Lynch, of Kansas City, representing the group of local safety councils, and numerous other officers and members of the Council representing various states and organizations.

Adopt Accident Reporting System

The first report was that of the Committee on Statistics presented by Dr. Julius Parmelee. This report recommended general adoption of the National Safety Council Standard Accident Reporting System which, it said was already in use by states and cities totaling over 68 million population.

Next came the report of the committee on Uniform Traffic Regulation presented by Miller McClintock. This report, which received the major attention of the Conference, included the revised Uniform Vehicle Code which itself is divided into four acts, dealing respectively with the registration of vehicles, anti-theft provisions, the licensing of drivers, and the operation and equipment of vehicles. Rumors had been heard of a possible attack on the examination feature of the license act from certain Middle Western opponents of this procedure, but the attack did not materialize. On the other hand, Commissioner of Motor Vehicles Benjamin Eynon of Pennsylvania presented to the Conference a powerful argument in support of the license law as the only means of controlling the incompetent or reckless driver.

Much Discussion on Speed

Act 4 of the Code came in for the greatest discussion, as it included the new speed regulation already described, and also a modernization of the operating rules for wide roadways and some slight changes in the provisions on right of way and turns at intersections.

The result of the extended discussion was to approve the Uniform Vehicle Code as revised, with only minor amendments. The Conference refused to authorize the passing of standing street cars even at a wide distance. A proposed amendment providing complete pedestrian control was also voted down. The Conference also maintained the present strict provisions on headlights.

The Conference adopted the Model Municipal Traffic Ordinance as reported by the Committee, the amendments here being only minor and in conformity with the Uniform Vehicle Code.

The last document reported by the committee was the code covering Street Traffic Signs, Signals and Markings, formulated by a committee of American Engineering Council and presented to the Conference by Sidney J. Williams, vice-chairman, in the absence of W. B. Powell, chairman.

Sign, Signal Recommendations

The principal changes included a more complete discussion of the new types of traffic actuated signals; a definite recommendation of the 3-color rather than the 2-color type of signal; a reclassification of signal systems as flexible progressive, alternate, simultaneous and independent; and a definite expression of preference for signals on each corner, on the near side, and showing in all four directions.

The Conference next received reports from the other committees including Railway Grade Crossings and Major Highway Intersections, Maintenance of the Motor Vehicle, and measures for Relief of Traffic Congestion. All of these were adopted with but few changes.

At the closing session, addresses by A. W. Whitney, Vice-President, National Safety Council, and Judge Levi M. Hall of Minneapolis, summarized recent developments and present needs in the vital fields of education and law enforcement.

Resolutions adopted at this session included the following:

Continuance of the present Executive Committee of the Conference for the purpose of promoting the adoption of Conference recommendations and dealing with any other problems that may arise.

Continuance of the Committee on Uniform Traffic Regulation, to perfect and complete the detailed provisions of the Uniform Vehicle Code, Model Ordinance and Sign and Signal Report in accordance with the action of the Conference, the Code to be then submitted for consideration and approval of the National Conference of Commissioners on Uniform State Laws at its annual meeting in August.

Express Gratitude to Hoover

A recommendation to the Congress of the United States, that the Bureau of Public Roads, the Department of Commerce, and other appropriate departments be authorized to carry on some of the traffic research activities which are badly needed.

A recommendation to Secretary Lamont that he appoint a committee to consider the setting up of a privately supported traffic research foundation.

A final message to President Hoover expressing the gratitude of the Conference for his leadership and pledging the individual delegates to every possible effort to obtain adoption of the Conference recommendations in their respective communities.—Public Safety.

Tact

Judge O'Flaherty: "Haven't you been here before me before?"

Casey: "No, y'r honor. Oi niver saw but wan face that looked loike yours an' that was a photograph of an Irish king."

Judge O'Flaherty: "Discharged. Call th' nixt case."

Uniform Street and Highway Traffic Statistics Needed

EFFEFFECTIVE handling of the highway traffic and congestion problem depends in large measure on the collection, compilation and practical analysis of uniform and standardized accident and traffic statistics by the different states.

This is the belief expressed by Dr. Julius H. Parmelee, director of the Bureau of Railway Economics, at Washington, chairman of the Statistics Committee of the National Conference on Street and Highway Safety, and prominent as an economist and statistician in the transportation field.

While not specifically urging a standard statistical form for collecting and reporting accident and other traffic data, Dr. Parmelee pointed out that effective steps toward meeting the problem as a whole must be based upon statistics which are comparable in nature and generally similar in classification and grouping.

He said:

"In proposing traffic remedies or in devising regulations and restrictions, we must first crystalize in the minds of the public the magnitude and complexity of the problem.

"It avails little to propose a remedy or a regulation if at the same time we do not make clear and unmistakable the necessity for such a measure. This can be accomplished in the most effective way through the channel of uniform statistics. To my mind they offer the means for comparable study and for scientific approach to the whole traffic congestion and accident problem."

Dr. Parmelee pointed out that the country as a whole is not sufficiently fortified as to data on traffic accidents—their types, causes and frequency. He asserted that these factors should be measured in specific and comparable statistical terms.

He added:

"Some agency in every state should be clothed with authority to receive accident and traffic reports, and to compile and coordinate them. Reasonable uniformity in tabulating and reporting the figures from these reports is essential.

"Many things are to be learned of the congestion and accident problem through such statistics. First, there is the factor of road and lighting conditions; second, there is the type and condition of the car; third, the element of age, experience and physical condition of the driver, and last, the primary cause of the accident.

"Information of this nature will assist the highway authorities in every state and municipality in definitely putting their finger on the most frequent causes of accidents, and will aid more quickly and effectively to devise remedies."

Dr. Parmelee expressed the belief that the people of the country will realize the serious aspect of the congestion and accident problem only when it is put before them clearly in statistical terms.

Among the factors susceptible to concrete analysis in the traffic and accident problem, Dr. Parmelee pointed to recklessness of motorists and carelessness

of pedestrians. More than 700,000 persons are being injured in traffic accidents each year, he continued, but the country has no comprehensive grasp as to the magnitude or frequency of each direct or contributing cause.

He added:

"Traffic and accident statistics of this nature can be made the basis of safety education in the schools, and educational work among drivers and pedestrians. If safety education is to accomplish its best results, we must know the scope and magnitude of each primary cause of congestion and accidents.

"It is entirely likely that a study of traffic rule violations from the notations on the records of drivers' licenses will reveal that a small part of the licensed drivers—possibly from two to five per cent—are habitual and reckless violators of traffic and safety rules, and that possibly three-fourths of the drivers of the country have no violations noted on their records.

"The accident problem then would be clearly one of dealing effectively with a small part of the total number of persons who are driving automobiles, and responsible for the reckless driving factor.

"It is difficult indeed to say what proportion of the drivers of automobiles are responsible for reckless driving accidents until we are in possession of dependable and comparable statistics on this point." —Roads and Streets.

THREE STATES GET OVER \$34,000,000 IN GAS TAX

A total of \$431,636,454 in gasoline taxes was collected in the 48 states in 1929, according to information compiled by the U. S. Bureau of Public Roads. The number of gallons of motor fuel taxed was 13,400,000,000.

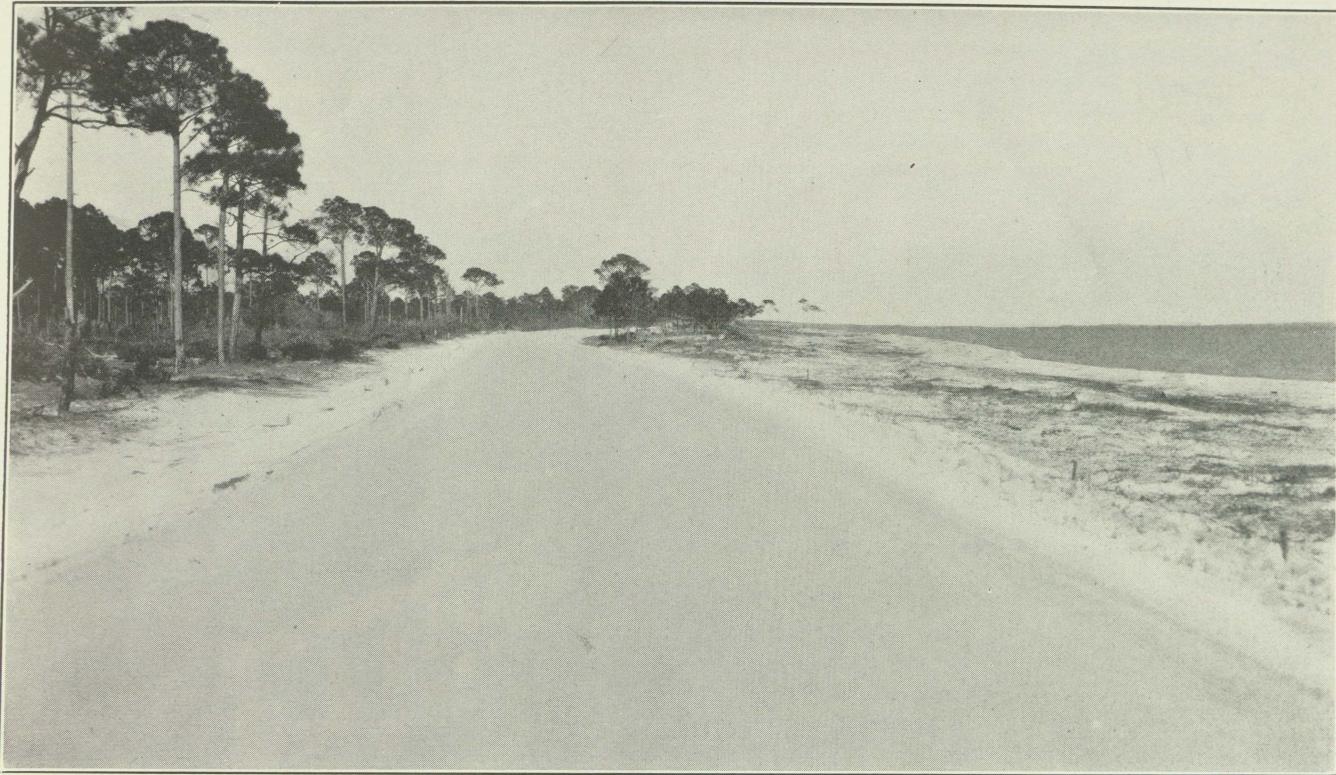
The average tax was 3.22 cents during 1929, as against 3 cents in 1928. Three states now have a six cent tax, eight a 5 cent tax, 19 a four cent tax, one a 3½ cent tax, ten a 3 cent tax, and seven states and the District of Columbia a 2 cent tax.

Pennsylvania collected the largest total, \$35,757,816, California was second with \$34,192,087, Ohio third with \$34,082,188. Next came Texas with \$22,317,494 and Michigan with \$21,321,929. New York did not put its gas tax law in effect until May 1, but in eight months collected \$19,087,392. Next in order came Indiana with \$15,610,540, Florida with \$12,231,336, North Carolina with \$12,006,384, Illinois with \$11,659,778 (collected in five months), Georgia with \$10,224,108. Five states, Iowa, Massachusetts, New Jersey, Tennessee and Virginia, collected sums under \$10,000,000 but larger than Minnesota's \$8,892,125 total.—Texas Highway Bulletin.

Sales Talk

Wife: "The garage man says that our car must be thoroughly overhauled."

Husband (wearily): "You win. Go down and pick out your new car."



\$114,000,000 Expended for Roads

Thirty-five States Report on Awards During First Quarter of 1930

SHOWING an increase of more than 100 per cent over the first quarter of 1929, highway construction expenditures in 35 states during the first quarter of 1930 amounted to more than \$114,000,000, according to a statement by Secretary of Commerce R. P. Lamont, based on reports from governors of the states involved. Expenditures during the first quarter of 1929 in these states amounted to \$50,910,133, the big increase in expenditures, according to the secretary, being "especially significant in connection with the problem of spreading employment throughout the year." Thirty governors of the thirty-five states filing returns report first quarter increases, while sixteen announced contract awards of 100 per cent or more above the corresponding

period last year. Three states that awarded no road contracts in the first quarter of 1929 reported awards in the first quarter of this year of \$4,357,075. Ohio and Idaho show the greatest relative increases, the former reporting first quarter awards 11 times greater than a year ago and the latter 9 times greater. Pennsylvania led the states in dollar value of contracts, awarding \$15,469,853 the first quarter of 1930, as compared with \$2,282,813 in the first quarter of 1929. First quarter gains in Southern states include the following: Maryland, 225 per cent; North Carolina, 155 per cent; Missouri, 144 per cent; Florida, 109 per cent; Virginia, 100 per cent; Texas, 33 per cent; South Carolina, 28.8 per cent.—Manufacturers Record.

Getting on Nicely, Thank You

"Tell me, Margaret," said Mrs. MacGuire, "how do you and your husband get along together?"

"Very nicely indeed," replied Mrs. Murphy. "Here, Mrs. MacGuire, we've been married goin' on seven months, and I haven't had to call the police in but twice."

Appel: "My son is a jack of all trades. What shall I do with him?"

Sass: "Buy him a drug store."

The Pun of the Month

First Garage Mechanic: "A Mr. Beard from Calaveras County was in a few minutes ago."

Second Garage Mechanic: "An old timer?"

First Garage Mechanic: "No, a new carburetor."

The Courteous Motorist

"Which do you like better, balloon tires or high-pressure tires?"

"I like balloon tires better."

"What kind of a car do you have?"

"I don't have any; I'm a pedestrian."

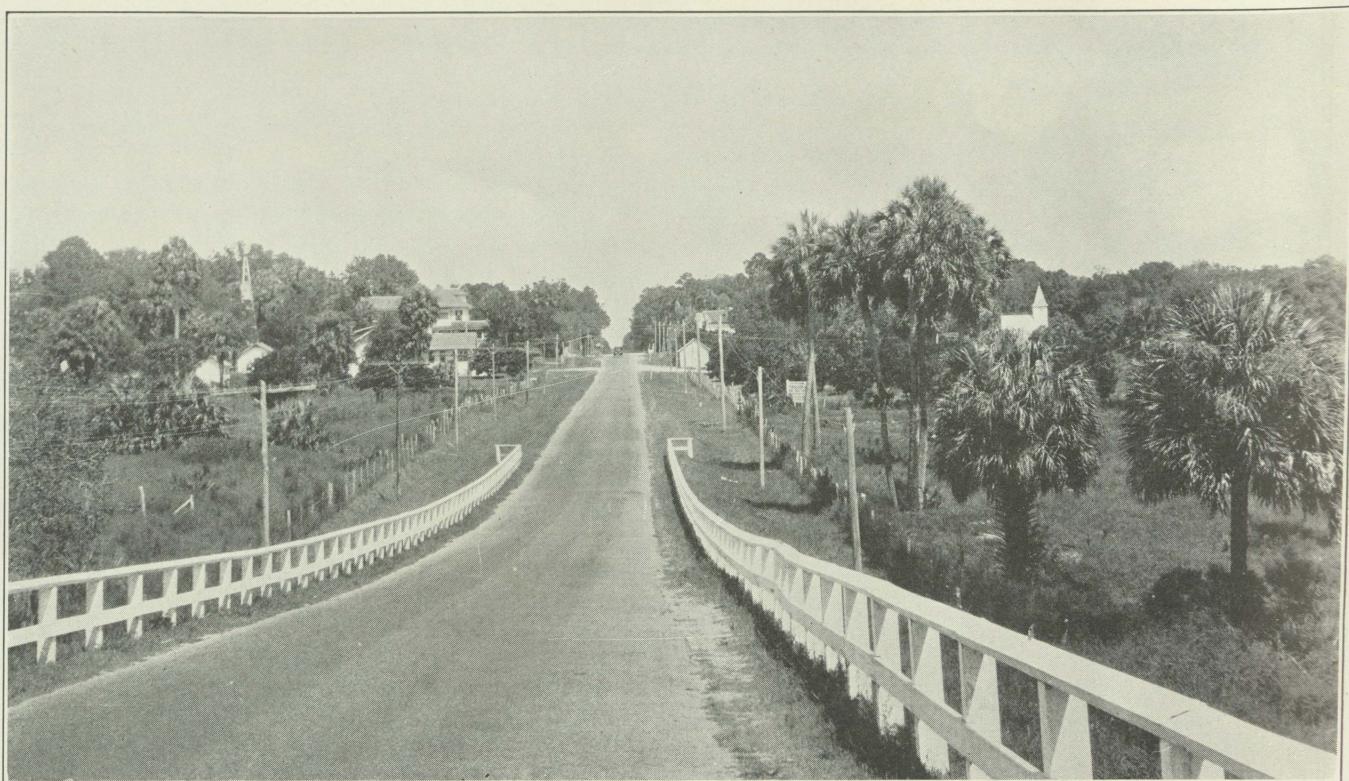
Music Hath Charms

A mother and daughter were listening to a band in the park.

The mother asked: "What's that they're playing, Mary? It sounds to me like Wagner."

"No, I don't think it's Wagner," said Mary. "I think it's Chopping. I'll go to see."

On her return from the bandstand she said, "We were both of us wrong. It says, 'Refrain from Spitting'."



San Antonio Man Wins Decoration

King of Spain Sends Medal for Work for Old Spanish Trail

HARRAL AYRES, managing director of the Old Spanish Trail development, will receive a distinguished honor from the King of Spain when he receives the Condecoration of the Royal Order of Isabel la Catolica, with title of Knight Commander at a reception and ceremony of presentation Tuesday evening at the home of Mrs. Henry Drought, 1215 North St. Mary's Street, for his work in connection with the Old Spanish Trail movement.

Officiating at the ceremony will be the Spanish Consul Pablo de Ubarri, Spanish consul for Texas and New Mexico.

In the official party conferring the decoration besides Ubarri and Mrs. Drought will be Maj. Gen. William Lassiter, commander of the Eighth Corps Area, and his personal staff; Enrique Santibanez, consul general of Mexico; Col. H. M. Dickmann, president of the San Antonio Automobile League; Werner N. Beckmann, a representative of the Old Spanish Trail board; Dr. Frederick Combe, T. H. Etheridge, president of the San Antonio Real Estate Board; Mayor C. M. Chambers, County Judge Perry S. Robertson, State Senator W. A. Williamson, Arnold Shanklin, former United States consul to Mexico, and Walter Walthall, president of the San Antonio Chamber of Commerce.

The jewel of the order is a double-sided Spanish sunburst, two inches in diameter, suspended from a laurel wreath. On one side is the name of the order, and on the other is "La Lealtad Acerisolada," expressive of loyalty and merit.

Ayres accepted the Old Spanish Trail leadership in 1919 when there was no regular route across the

Southern borderlands. Automobiles were forced to pick their own course through mud, cattle lands and deserts with undependable ferries assisting them in crossing the numerous rivers en route.

The leadership of San Antonio and constant efforts for 10 years was the thing that eventually made possible the Old Spanish Trail. Federal and State officials were slow in granting recognition to the route and failed to do so until 1922.

The old Spanish Trail movement was organized at Mobile, Ala., to build a highway from Florida to New Orleans. Western States became interested, and the plan was changed to an Atlantic to Pacific highway. No recognition was given the work for seven years because of the cost of construction and the slow progress.

There was no recognized route across South Texas until 1921. A conference in Houston in 1919 resulted in the routing of the road through San Antonio, though Dallas had been the prevailing choice until that time. San Antonio was chosen because of its missions and historical ruins of the Spaniards.

Ayres was selected as managing director in San Antonio shortly after the Houston conference. The first step of the San Antonio group was to hold a convention in this city. More than 100 West Texans attended this meeting and pledged the completion of the route through West Texas.

Ayres went to Washington in June, 1922, and succeeded in having a declaration signed by Senators and Congressmen that the road was a basic National need. The United States Bureau of Education sided with the road builders as did the American Automot-

bile Association. This work in Washington took seven months, and resulted in liberal appropriations. Construction work followed within a short time.

Florida in 1929 became the first State to complete the paving of its Old Spanish Trail route.

A women's department of beautification was started in 1923 under the leadership of Mrs. F. W. Sorell and Mrs. A. H. Moos of San Antonio to remove advertising signs and to beautify the road.

In 1925 the United States highways were designated. The Old Spanish Trail through West Texas was not recognized. Ayres again went to Washington after efforts to obtain recognition had failed because he was not present in the capital. On his arrival in Washington he opened the question and was successful in having the San Diego to St. Augustine route made wholly a United States highway.—San Antonio Express.

Silas: "What's that I hear, Hiram, about your hired man falling off the roof when he was shingling the barn last week?"

Hiram: "Yeh. He fell into a barrel of turpentine."

Silas: "Did it hurt him much?"

Hiram: "Don't know. They ain't caught him yet."



PAVING DELAYS ARE TOO COSTLY

Unemployment Is Not Relieved by Projects That Remain on Paper—By E. E. Duffy

Paving delays are at present costing motorists all over the country sizeable sums of cash.

Hundreds of miles of street paving projects upon which preliminary planning has been done are still "paper" projects, despite the need for employment in cities and the need for more and better motoring space.

It is not as though the public were unconcerned, for most paving projects originate from the demands of citizens. Legal intricacies are often given as the reason for delays in paving matters, and no doubt many cannot be avoided, but for the most part such delays are more a state of mind than a state of fact.

The present is considered an ideal time for communities to build pavements. Aside from the fact that there is a dire need for more paved roads and streets, paving contract awards are going at reasonable figures. Contractors naturally desire to keep their paving outfits busy and their working forces intact. Pavements, particularly in towns and cities, are usually paid for by special assessment with payments spread over a number of years. Communities paving now will not unduly burden themselves and they will perform the important function of aiding employment.

The country's paving task is not only that of new construction but also that of reconstruction. Older and larger cities possess pavements that are hopelessly inadequate for modern traffic—to rebuild them is an absolute economy measure.

Unemployment still exists and, regardless of promises made by various communities to expedite construction of public works, many have still to make actual progress. A project on paper does not give men jobs. Neither does it give motorists a place to drive.

By some odd quirk the period during which new city officials assume office is also a season for delay in construction projects. But now that the new officers are ensconced there is no good reason why blue prints should not be transformed into hard-surfaced pavements, schoolhouses, courthouses, sewers, and so on—without delay.

Desperate Chances

"Is your husband a good provider, Dinah?"

"Yessum, he's a good providah all right, but I'se allus skeered dat niggah's gwine ter git caught at it."

Slippery Slope

Greenboy: "Of course I know marriage is a grave step."

Oldun: "Step! My dear lad, it's more like a flight of steps and every one of 'em greased."

His Mistake

They're pickin' up the pieces,
With a dustpan and a rake,
Because he used his horn
When he oughta used his brake.

"Offsher, you'd better lock me up. Just hit my wife over the head with a club."

"Did you kill her?"

"Don't think sho. Thash why I want to be locked up."

Status of Construction

THROUGH MARCH 31ST, 1930.

Proj. No.	Contractor	Road No.	County	Total Length Miles	Clearing Miles	Grading Miles	Base Miles	Surface Miles	Type	Per cent Complete
40-B	L. M. Gray	4	Broward	.31			0.00	0.00	R.B.S.T.	0.00
62-A	L. B. McLeod Const. Co.	24	Osceola	6.32			4.00	2.00	R.B.S.T.	45.00
62-C	L. B. McLeod Const. Co.	24	Osceola	12.09			10.50	0.00	R.B.S.T.	75.00
63-A	Morgan-Hill Paving Co.	4	Palm Beach	9.21				4.20	Concrete	30.00
63-C	Robt. G. Lassiter & Co.	4	Broward	13.24				0.00	Concrete	0.00
64-A	H. E. Wolfe Const. Co., Inc.	17	Hillsborough	9.61				8.26	Concrete	80.00
64-C	H. E. Wolfe Const. Co., Inc.	17	Hillsborough	9.61				9.61	Concrete	99.00
65	C. C. Moore Construction Co.	5	Hillsborough	.30			0.00	0.00	R.B.S.T.	0.00
68-A	S. P. Snyder & Sons	4	Broward				0.00	0.00	R.B.S.T.	0.00
73-A	Wm. P. McDonald Const. Co.	17	Polk	3.66			0.00	0.00	Mac. Asph.	0.00
74	Manly Const. Co.	2	Orange	14.34			0.00	0.00	Bit. Mac.	0.00
587-B	Duval Engr. & Contr. Co.	5-A	Suwannee	.34			0.00	0.00	R.B.S.T.	0.00
669-Y	State Convict Forces	27	Collier	10.55			10.55	10.55	R.B.S.T.	100.00
698	H. E. Wolfe Const. Co.	19	Leon	12.45				0.00	Concrete	0.00
706-A	T. B. Gillespie, Inc.	28	Clay-Putnam	10.83			10.83	0.00	R.B.S.T.	80.00
721-B	L. M. Gray	3	Putnam	.25			0.00	0.00	R.B.S.T.	0.00
756	State Convict Forces	19	Marion	11.89			8.76	0.00	R.B.S.T.	60.00
758	A. E. Campbell	2	Polk	.10			0.00	0.00	R.B.S.T.	0.00
766	State Convict Forces	10	Bay	8.74	8.74	8.35			Graded	90.00
787	State Convict Forces	10	Walton	16.29					Graded	61.36
788	W. J. Bryson Paving Co.	10	Walton	17.50	16.62	15.75			Graded	92.73
798	State Convict Forces	13	Nassau	15.03	9.18	6.88			Graded	52.00
806-D	R. C. Huffman Const. Co.	25	Hendry	12.77	12.77	12.77			Graded	100.00
820	H. D. Spangler & Co.	96	Jefferson	9.45	8.03	2.36			Graded	38.00
821	H. D. Spangler & Co.	96	Jefferson	5.18	5.18	4.82			Graded	93.00
832	State Convict Forces	10	Santa Rosa	16.01	8.00	6.30			Graded	30.00
833	State Convict Forces	10	Santa Rosa	8.02	7.25	3.25			Graded	26.00
835	Manly Construction Co.	5	Marion-Citrus	.15			0.00	0.00	R.B.S.T.	0.00
840	State Convict Forces	115	Walton	10.20	9.78	8.67			Graded	82.00
841	State Convict Forces	115	Walton	6.44	2.89	2.58			Graded	42.00
842	W. J. Bryson Paving Co.	115	Walton	10.15	10.15	9.64			Graded	94.00
845	State Convict Forces	19	Taylor	8.57	8.57	8.20			Graded	93.00
846	State Convict Forces	19	Taylor	11.00	9.00	6.00			Graded	58.00
854	G. W. Byrd	60	Walton	9.81	9.81	9.81		4.00	Sand Clay	80.00
855	C. C. Moore Const. Co.	60	Walton	9.93	9.93	9.93		9.93	Sand Clay	100.00
870	S. J. Groves & Sons	143	Palm Beach	10.83	1.00	.30	0.00	0.00	R.B.S.T.	0.02
876	State Convict Forces	78	Duval-St. Johns	20.00	7.00	5.00			Graded	20.00
878	State Convict Forces	77	Gilchrist	12.00	2.50	.75			Graded	10.00

Total complete March 31st, 1930..... 2,986.03 2,943.01 1,564.76 2,380.14
 Complete month of March..... 13.97 11.66 8.33 10.25
 Total complete February 28th, 1930..... 2,972.06 2,931.35 1,556.43 2,369.89

TOTAL MILEAGE COMPLETE

Concrete.	Brick	B.C.	S.A.	B.M.	Asph.B.	R.B.S.T.	S.C.S.T.	S.C.	Mac Asph.	Marl	Total
Complete to Feb. 28, 1930.....	342.40	17.13	39.75	114.75	109.57	23.70	1,307.50	290.54	201.59	0.00	27.58 2,474.51
Complete month of March.....	2.85						7.62		1.67		12.14
Complete to March 31, 1930.....	345.25	17.13	39.75	114.75	109.57	23.70	1,315.12	290.54	203.26	0.00	27.58 2,486.65

Contracts Awarded by State Road Department

JANUARY 1st, 1930, TO JUNE 20, 1930

Proj.	Road	County	Contractor	Length Miles	Length Feet	Contract + 10%	Type
70	5	Charlotte	Tampa Shipbuilding & Engr. Co.		75	\$ 45,676.40	Bascule
73-B	17	Polk	Cone Bros. Const. Co.		305	43,984.54	Conc. Bridge
757-B	2	Polk	Florida Bridge & Const. Co.		117	15,234.78	Conc. Bridge
758-B	2	Polk	Cone Brothers Const. Co.		436	59,267.06	Conc. Bridge
20	1	Holmes-Washington	Florida Basic Rock Co.	2.0		19,800.00	Rock Base
62-A	24	Osceola	L. B. McLeod Const. Co.	5.22		123,676.65	R. B. S. T.
73-A	17	Polk	Wm. P. McDonald Const. Co.	3.66		88,283.19	Mac. Asphalt
63-C	4	Broward	R. G. Lassiter & Co.	13.24		470,941.54	Concrete
74	2	Orange	Manly Const. Co.	14.34		387,032.94	Asp. Concrete
698	19	Leon	H. E. Wolfe Const. Co.	12.45		276,425.45	Concrete
65	5	Hillsborough	C. M. Moore Const. Co.	.30		23,780.90	R. B. S. T.
721-B	3	Putnam	L. M. Gray	.25		18,829.00	R. B. S. T.
835	5	Marion-Citrus	Manly Const. Co.	.15		4,439.71	R. B. S. T.
40-B	4	Broward	L. M. Gray	.31		10,484.43	R. B. S. T.
68-A	4	Broward	S. P. Snyder & Sons	.37		28,972.93	R. B. S. T.
587-B	5-A	Suwannee	Duval Engineering & Contr. Co.	.34		17,736.22	R. B. S. T.
876-A	78	Duval-St. Johns	Standard Dredging Co.	8.00		81,574.76	Shell Base.
758	2	Polk	A. E. Campbell	.10		2,095.74	R. B. S. T.
500-B & C							
515	20	Bay-Jackson	Marianna Lime Products Co.	29.43		328,212.85	R. B.
750	14	Gilchrist	L. M. Gray	12.26		109,936.23	R. B.
669-Y	27	Collier	Fred D. Beasley, Inc.	10.55		22,320.49	Surf. Treatm't.
769	5	Lee	Fred D. Beasley, Inc.	1.89		26,988.64	R. B.
870	143	Palm Beach	Central Fla. Const. Co.		135	8,790.26	Timber
766	10	Bay	Fla. Bridge & Const. Co.		555	4,461.47	Timber
688	10	Bay	R. J. Arrington & Son		60	396.16	Timber
767	10	Bay	J. U. Fletcher		45	751.43	Timber
Totals				114.86	1728	\$ 2,220,093.77	

PROTECTION RAILWAY GRADE CROSSINGS

(Continued from Page 15)

ing the law in effect in many states. When a pedestrian goes under the gate he is doing the same thing. There seems to be a tendency on the part of police officers to wash their hands of railway grade crossings, and leave it entirely to railroad companies to meet the situation. Enforcement officers should give as much consideration to violations at grade crossings as other points, co-operating with the railroad officials.

An effective aid in enforcement of traffic laws and regulations is undoubtedly the drivers' license laws with examination. Safe driving practice at grade crossings should be given a reasonable amount of attention in such examinations.

The committee points out that notwithstanding the efforts of the traffic authorities to eliminate hazards at crossings, the public in the main must be depended upon for voluntary compliance with the rules of prudent and safe conduct at such points. The committee says:

Statistics indicate that a large percentage of the accidents occur in broad daylight when there is a clear view of the tracks in both directions, and in no small number of cases the vehicle runs into the side of the train. It is obvious that neither laws nor enforcement are effective. There is need for continual effort to educate the public on these matters.

Such educational efforts should be directed not only to impressing motorists and pedestrians with the need for obeying the regulations, but also in making clear to them what are dangerous and what are safe driving practices.

It is of fundamental importance that knowledge of the laws, regulations, traffic control measures and proper practice be carried to all of the public, and to this end the principles stated in this report should be utilized as the basis for suitably prepared selections for presentation to the general public.—Roads and Streets.

No Radiator Cap

First Kid (at the zoo): "Oo-oo-oo! Lookit the rhinoceros!"

Second Kid (whose dad took him to the auto show): "That ain't no rhinoceros; that's a hippopotamus. See, he ain't got no radiator cap."

Where It Hit Her

"Just where did the automobile hit you?" asked the magistrate.

"Well," said the injured young lady, "if I had been wearing a license plate it would have been pretty badly damaged."

A colored man went to his pastor and handed him a letter to the Lord, which read: "Please send this old darkey \$50.00 right away." The pastor called together several of his friends and said: "This poor man has so much faith in the Lord we should not let him be disappointed. Let's make a collection for him." They contributed \$42.00 which was sent to the ingenious petitioner.

Next day the colored man gave the pastor another letter. This one ran: "Dear Lord, de nex' time you send dis darkey money, don't send it through no person—send it to me direct."

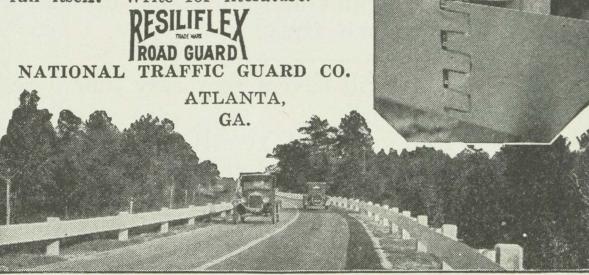
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"Little girl," asked the man of the chorus lady, "do you walk back from rides?"—and she shyly answered, "Boy, I ride back from walks."

"What caused your husband to leave home?"

"I haven't the least idea. He just picked up and left the morning after my mother and two sisters came to spend the winter with us."—Kreolite News.

Judge: "Do you understand the nature of an oath, Mrs. Jones?"

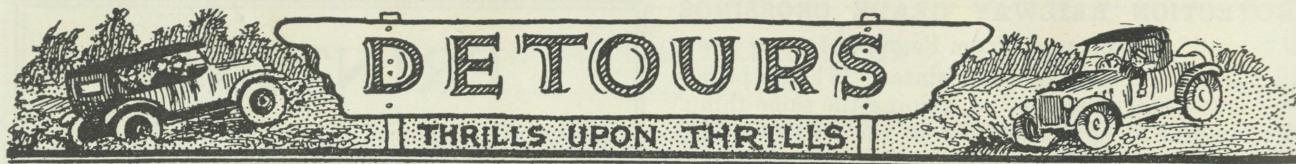
Mrs. Jones: "Well, my husband is a golfer and my son drives a second hand flivver."

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Idle Thoughts of a Motorist

Today as I went around a truck loaded with telephone poles I noticed that it was flying a red flag inscribed with the legend, "Danger!" What could be dangerous, I wondered, about telephone poles? And then I remembered that when the poles were erected wires would be strung on them, and at the ends of the wires would be telephones. Still, telephones are not dangerous. And then I remembered that where the opposite ends of the wires converged there would be a telephone operator, and I stepped on the accelerator. I once knew a telephone operator. —P. R. M.

Helen: "I don't see why he dates her—she's a terrible dancer."

Mary: "No, she can't dance but she sure can intermission."—Blue and Gray.

Mistress: "You will have a very easy time here—we have no children."

Mandy: "Don't restrict yo'self on ma account, ma'am, bekase I's very fond of children, I is."—Blue and Gray.

Stranger: "Ah, Mrs. Mudge, one-half of the world is ignorant of how the other half lives."

Mrs. Mudge: "Not in this village, Miss."

"Do you know a fellow down your way with one leg named Oliver?"

"I'm not sure," returned the other doubtfully, "What's the name of the other leg?"

Doctor: "Let me feel your pulse."

Meek Sixteen: "Oh, doctor, that's the way you all begin."

"How come they call Cora Miss Atlantic City?"

"Because she has a bored walk."

Mother: "What did mama's little baby learn at school today?"

Son: "I learned two kids not to call me mama's baby."

"Don't you think Wordsworth was right when he said 'heaven lies about us in our infancy'?"

"Sure—but he forgot to add that everybody lies about us in our maturity."

Overheard at the Zoo

She was visiting a zoo and gathering as much information about the animals as possible in one short afternoon.

Eventually she came to the bears.

"Are these animals carnivorous?" she asked the keeper.

He scratched his head and then smiled brightly.

"They was, ma'am," he answered. "But they're all right since we washed 'em in carbolic."

More Team Play

"Is you wife having any success in learning to drive the car?"

"Well, the road is beginning to turn when she does."—Tronto Goblin.

Try Horseback

One of our statisticians says that he would rather be sunburned on his vacation than tanned on a week end.

Fair One: "Now before we start for this ride, I want to tell you that I don't smoke, drink or flirt, I visit no wayside inns, and I expect to be home by ten o'clock."

Young Gallant: "You're mistaken."

Fair One: "You mean that I do any of those things?"

Young Gallant: "No, I mean about starting for this ride."

It was held, by a recent decision of the courts, that a flat tire in the rear seat of an automobile is a fixture, because all personal property interest in it has been lost.—Okla. Whirlwind.

Customer: "Last week I bought a tire cover from you, and now I want my money back."

Clerk: "Why?"

Customer: "I put it on one of my tires and hadn't driven ten miles before the blamed thing wore out."

From the Old Scotch

Scotch Father (out riding): "Wee Sandy, why are ye a-hiding under the lap-robe?"

Sandy: "Whist, father, dinna ye see the toll bridge we're a-coming to?"

Father (quickly): "Hoot lad, move over so that your mither can get under wi' ye."

"Why is Jones looking for a cashier, he only hired one last week?"

"That's the one he is looking for."

Someone has predicted the time is not far off when gasoline or a substitute will sell for two cents a gallon. However, you can't run your automobile on predictions.

Happy are astronomers who go on finding new worlds, while reformers are trying to make something out of this one.

A Good Time All Over

"I envy that fat woman when she laughs."

"Why?"

"There seems to be so much of her having a good time."—Wall Street Journal.

"Where has your car been for the last two weeks?"

"I'm having a one-day paint job done on it."

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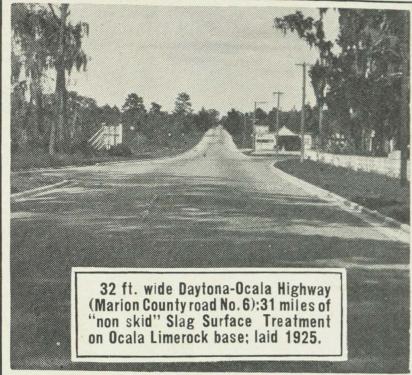
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as the cover material. What are the findings? Flat or elongated pieces of aggregate are detrimental to bituminous paving. CRUSHED SLAG is entirely free from this criticism . . . and its cubular and angular shape adds solidity and strength, for it provides a greater surface area for adhesion of the bituminous binder. Blue-gray in color SLAG is non-glaring (an important consideration in the Sunshine State) and it does not dust or fracture easily under traffic. These facts are part of the official records of these 2400 miles of LOW COST roads that last . . . and last!

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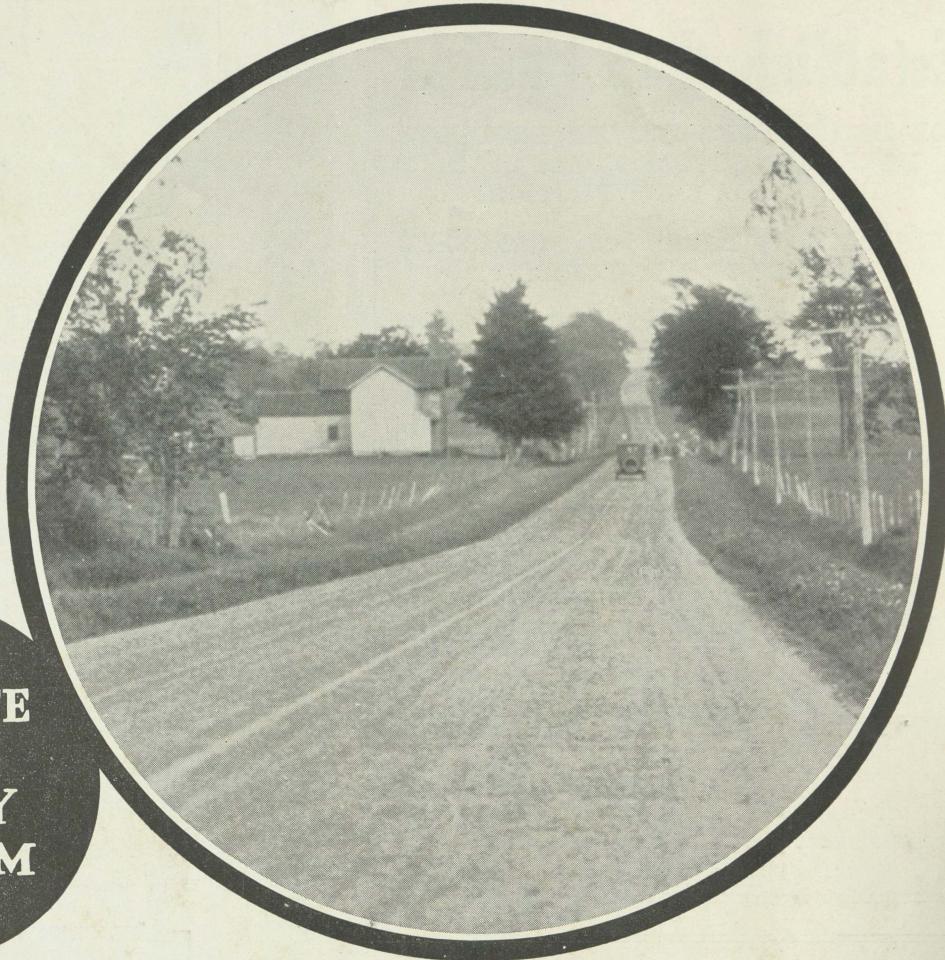
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